1902. NEW ZEALAND.

# EDUCATION: MANUAL AND TECHNICAL INSTRUCTION.

[In continuation of E.-5, 1901.]

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

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

During the year steady progress has been made in the formation of adult classes for technical instruction, and there has been a large increase—more than fivefold—in the classes for manual instruction in public schools, principally in the direction of introducing into the work of the preparatory classes and into the lower standard classes exercises based upon kindergarten methods. This feature is sound as far as it goes, as it seems to show that the spirit of the new movement is being rightly understood, for the change indicated by the introduction of hand-work into the school is not one affecting the mere details or machinery of school work, but is more fundamental in its character. Changes that affect only the externals of the school system, or only increase the number of disconnected subjects in the school syllabus, are sure to turn out in the end to be mere temporary devices. It has been the fashion to speak of that portion of a man's education that he receives at school as a preparation for life; in truth, a man's education goes on throughout his whole life, and the time spent at school is not merely a preparation for life, it is part of life itself. If the manual dexterity and the regular and easy co-ordination of hand and eye and brain that lead to the development of skill in the workman or the engineer, the artist or the surgeon, be not developed in youth, then there is a gap between the school-life and the after-life that is unnatural and prejudicial to the success of the adult; for there are few occupations in which some degree of manual skill is not at one time or another useful, and none in which men or women can afford to be without that all-round training of the mind that can be obtained only by combining the exercise of the muscular activities with that of the observation, reason, and memory. The instincts of the child herein guide him aright; he is constantly examining objects and seeking for some fresh outlet for his muscular activities. (As every instinct corresponds to some reality, no instinct should be overlooked; but every instinct should either be trained or be guided aright in the years of childhood.) These instincts are not such as mark the brute, but belong to the higher human intelligence, and they must therefore be taken seriously as indications of undeveloped powers, which need to be directed and disciplined, not suppressed, until they appear as scientific habit and manual skill in the youth and the adult. The new

method of treatment accordingly extends not to one or two subjects of the curriculum, but, more or less, to nearly all. Besides the advantage derived from the fact that manual training brings into the school course a natural co-ordination by co-ordinating all the subjects of that course with life, its introduction into the schools gives opportunity to discover aptitudes that would otherwise perhaps be unsuspected, and to develop the pupils in such a way that they make intelligent use of this opportunity. It is evident that only a beginning can be made in the elementary school; hence the necessity for carrying on the work more completely in continuation and technical classes, and in the secondary schools and university colleges.

Professor John Dewey, one of the foremost men in matters of education in the United States at the present time, lays great stress on the points just referred to, and pertinently asks, "Now that the great value of manual training has come to be recognised in secondary" (and, we may add, primary) "schools, why should not all the pupils have the benefit of it?" Again, he says, "Domestic science should be classed with science studies, and as such be provided with a laboratory." And, if domestic science, why not, it may be added, agricultural science and the practical and scientific work that forms the basis of the other industries of life? In the elementary school all that can be done is to keep this aim in view, and to shape the course so that a firm foundation may be laid. A sound though rudimentary course of nature-study, the continuous training of hand and eye, and the development, by easy measurements, experiments, and observations performed by each child for himself or herself, of a habit of knowing things themselves are the main characteristics that should mark this side of a pupil's work in the public school.

There are now (July, 1902) 360 classes established in various parts of the colony under the Manual and Technical Instruction Act, exclusive of school classes. The number last year was 293. Of the total of 360, 35 are continuation classes; the remainder are classes for manual or technical instruction. The number of school classes in operation last year was 132; the number in operation now (July, 1902) is 700. Of these, 18 are established in connection with secondary schools; the rest are in public elementary schools. Of the latter, 231 are connected with town schools, and 451 with schools in country districts. It is hoped that with the issue of the new standard syllabus shortly to be gazetted there will be a marked increase in the number of "hand-work" classes established in connection with the upper standards.

Last year (1901) special grants, amounting to £1,875 in all, were given to the Boards of Education to enable them to provide training for their teachers in those subjects prescribed by the regulations under the head of "Hand-work" in school classes. The grant, which is intended to cover the cost of the training in manual and technical work of pupil-teachers and normal-school students as well as of teachers already on the staffs of the schools, is to be renewed this year. From the reports that have been received, the several amounts seem to have been used in a careful and judicious way, and no doubt results will show that the money has been wisely expended.

New regulations were issued at the beginning of the present year, removing many of the restrictions that seemed necessary at first, and simplifying the mode in which grants are obtained. Further experience shows that still more simplification is possible, and the regulations will be further amended in this

direction.

Many local bodies having shown a disposition to assist in promoting technical education, but being doubtful as to their right to representation on the bodies of managers of associated classes, a short Bill will be introduced to make it clear that such local bodies have the same powers as the associations already specifically named in the Manual and Technical Instruction Act of 1900. The result will probably be the formation of strong "associated classes" in all the chief centres, under the Boards of Education as controlling authorities, but having their own managers representing all the bodies combining in the work. Such a course will probably tend both to efficiency and economy of money and of effort.

TABLE Y.—MANUAL AND TECHNICAL INSTRUCTION, 1901.

				Subject	s of Insti	ruction (	Subjects of Instruction (grouped), and Average Attendance.	and Ave	age Atte	ndance,	1				Payments	
School or instructor.	Freehand (from Flat and Hound) band Shading.	Drawing from Nature, Painting, and Modelling.	Mechanical Drawing and Brigineering, and Ma- chine-construction,	Geometry and Perspective.	Design and Ornament.  Architecture, and Building-	construction.	Mathematics.  Vatural and Experimental Science (Botany Chemis-	Science (Botany, Chemistry, and Physics).	Plumbing (Theory and Practice).	Domestic Instruction.	English, and Commercial Subjects, and Latin and French.	Singing and Blocution.	Kindergarten Work.	Capitation.	Grants for Buildings, Apparatus, Material.	Pound-for- Pound Subsidy on Voluntary Contributions.
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Anderson Mr. B. M. Marie.	17	17	:	::	· ·		•		:	:	#	:	:	1 5	:	149 15 2
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Technical School, Napier	-	9									:		:	1	:	:
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Education Board, Westland	:	:	:	:	-	· 		17	:	:	:	:	:	6 15 9	;	
Kumara Public School	:	:	:	:				01						01 10		•
School of Art Christobase	_	*****							:	:	:	:	:	71	:	:
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1901—continued.
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	Singing and Blocution.		: :	:	:	:	:	:	:	:	:	:	:	:	: :	7	:	:	:	:	:	17
	English, and Commercial Subjects, and Latin and French.		: :	:	:	:	:	. 1	22.7	201	:	:	:	:	: 0	010	:	:	:	56	32	685
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Attend	Plumbing (Theory and Practice).		::	:	:	:	:	:	:	:	:	:	:	:	. 4	2	:	:	:	:	:	166
Average	Моод тог		: :	:	:	:	:	:	:	:	:	:	:	:		3	:	:	:	17	:	251
Subjects of Instruction (grouped), and Average Attendance	Vatural and Experimental Science (Botany, Chemis-try, and Physics).		: :	:	:	:	:	:	.71	:	:	:	:	:	: 6	e o	:	: ;	97	œ	:	73
on (grou	Mathematics.		: :	:	:	:	:	:	N O	<b>о</b>	:	:	:	:	• 2	e S	:	:	:	9	:	110
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cts of L	Design and Ornament.		: :	:	:	:	:	:	:	:	:	:	:	:	:	:	80	:	:	:	:	294
Subje	Geometry and Perspective.		: :	:	:	:	:	:	0	:	:	:	:	:	:	:	80	:	:	:	:	427
	Mechanical Drawing and Engineering, and Ma- chine-construction.		: :	:	:	:	:	:	: 2	07	:	:	:	:	: 6	ŝ	24	:	:	56	80	279
	Drawing from Mature, Painting, and Modelling.		: :	:	:	:	:	:	: -	C T	:	:	:	:	:	:	63	:	:	žĊ	:	581
	Freehand (from Flat and Round) and Shading.		56	:	:	:	17	:	: 9	07	:	:	:	:	:	:	110	:	:	6	:	754
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	School or Instructor.	Education Board, North Canterbury	Christehureb School Classes	Amberley Public School .	Fendalton Public School .	Addington Public School .	Technical Classes, Lieston	mochaical Change American	recullical Olasses Association, Asnourton	High Cohes Bear Misses	Classes at Timaru Girls' High School	Education Board, South Canterbury. Timaru Main Public Sohool	Timaru South Public School	Waimataitai Public School	Temuka District High School Technical Classes Association Dunadia	Education Board, Otago —	School of Art, Dunedin	Classes at Tokomairiro District High School	Education Roard Southland	Technical Classes, Associated, Invercargill	Technical Classes, Mataura	Totals

In the following table (Y1) a statement is given of the expenditure upon manual and technical instruction during the year.

TABLE Y1.—STATEMENT OF EXPENDITURE FOR YEAR ENDING 31ST DECEMBER, 1901. £ s. d. 2,805 12 11 Capitation ... ... ... ... Subsidy of pound for pound on contributions 729 13 £ s. d. 8 10 Grants Buildings and apparatus 3,440 Class material 3,596 12 3 Training of Teachers:— Auckland Educat Taranaki Education Board 100 150 Wanganui Wellington 0 Hawke's Bay 150 Marlborough 75 Nelson Grey Westland 75 75 North Canterbury South 125Otago 200 Southland Ō 150 1,875 Railway fares of teachers attending training-classes ... . . 256 0 instructors of 3 11 students attending registered classes of individuals Expenses in connection with Examinations:— Science and Art, Board of Education, South Kensington 63 10 City and Guilds of London Institute 13 12 10 2 10 ō ٠. Inspectors :-Salaries 659 10 10 Travelling-expenses 203 19 3 863 10 Advertising and sundries 56 10 3 Total £10,507 15

The following table shows the results of examinations conducted in the colony on behalf of the Science and Art Department, London, and of the City and Guilds of London Institute:—

London Technical and Art Examinations, 1901.

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

Subjects of Examination.	Aucl	dand.		nga- ui.		lling- on.	Pah	iatua.	Na	pier.		rist- irch.	Tin	aaru.	Dur	nedin
Subjects of Baammanon.	C.	P.	C.	Р.	C.	P.	C.	P.	C.	P.	C.	Р.	C.	Р.	C.	P.
Science and Art Department.																
Art.—	1				Ì			1		1						1
Drawing with chalk on the blackboard	15	13				٠			5	5	1	٠.				١
Geometrical drawing (art)	5	2	9	2	3	3					2	2			18	11
Perspective	5	3	1	1							3	1			10	1
Model drawing	22	20	5	4	6	6	1	1	11	8	7	6	2	2	27	22
Freehand drawing in outline	21	13	14	5	6	4	6	1	7	4	7	5	4	3	50	20
Drawing in light and shade	14	10	3	2	6	4	١		5	5	4	3	2	1	13	10
Principles of ornament				.,							1			١	2	1
Design			1	1	7	2			٠.		1	1	·	١	1	l
Painting from still life	5	5	2	2	1	1						١			4	3
Painting ornament			1	٠.						١	1	1			2	2
Drawing from the antique	6	6	1		2	2	١	l Ì		١.,		١			5	3
Drawing the antique from memory			1	1			٠.	l l		١	١	١.,			1	li
Drawing from life	١		3		8	2		۱۱			٠.				2	1
Students' works	19	9	15	6	22	6			13		4	2			3	1
Science-	1					-		'		ĺ	-	_	• • •	٠.	"	1
Practical plane and solid geometry	1		7	5	2	1		١ ا		٠.	.,	-	. 2	İ	4	3
Machine construction and drawing	16	13			10	10	::				::	٠.			20	14
Building construction	5	4	1	l ::	11	9	::	[ ]		::		2		• •	7	6
Mathematics	l ĭ	ī	2	i			::	••			_		••	٠.		1 ~
Practical mathematics	1				i	i	::	••	• •	• • •	•••	• •		٠٠.	•••	
Applied mechanics	2	i						••	• •	•••	• •		•••	• •	3	.:
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Magnetism and electricity	6	2	• •	• • •	2	2	• •	••	• •	٠٠	i	i	• •	• • •	1	1
Principles of agriculture	"	4	2		1.		• • •		• •			1	• •	• • •	• •	
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City and Guilds of London Institute.		:														
Woodwork, final	1	:									6	5				1
Carpentry and joinery (ordinary)					::	::			• •				• •	• • •	l i	1 ::
Mechanical engineering	3	2	• • •		4	1						[	• • •		8	$\frac{1}{7}$
Plumbing (preliminary)		- 1			2	2			• •	• • •	••	••			1	1
" (ordinary)			• • •		1	1			• •	•••	• •	• • •				
(honours)	1			::	1	1			• •	•••	• •	• • •	• •	• • •	5	1 ::
Painters' and decorators' work	3						• •		•••	•••	3	3	• •			4
Gas manufacture (honours)			1	i					• •	• •	-		• •	• • •		
Electric light and power (preliminary)				_	10	5			••	•••	••	••	• •	• • •		
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## MANUAL AND TECHNICAL INSTRUCTION IN THE SEVERAL EDUCATION DISTRICTS.

#### AUCKLAND.

## REPORT OF THE BOARD OF EDUCATION.

Technical Instruction.—Very little has been done during the year in the formation of school The Board has undertaken the management of the Auckland Technical School, and applications have been invited by advertisement within the colonies and in England for a director. At present the work of the school is carried on under great disadvantage in a rented building quite inadequate for the purpose.

#### REPORT OF THE INSPECTORS OF SCHOOLS.

A good deal of suitable kindergarten work has been done in a number of the schools, and it is quite a pleasure to the children. It is likely to be taken up more freely during the coming year.

In one or two schools "brush-work" has been substituted in some of the intermediate stan-

dards for the ordinary drawing course, but it would be premature to speak of results, which, how-

ever, are not unpromising.

As yet nothing has been done to provide regular instruction in woodwork or practical cookery, though the Department offers substantial grants in aid of such classes on very reasonable conditions. Early in the year I suggested that immediate provision should be made for teaching these subjects in the city and suburban schools at two centres, one at Newmarket and the other at Newton East or Howe Street. To classes at these centres pupils from most of the city and suburban schools could easily walk. I was then, and still am, of opinion that these special subjects cannot be conveniently taught either at each school or at a single centre. It seems to me that there is urgent need of adequate provision for giving the girls of the higher classes a course of instruction in cookery not only in Auckland, but also at the Thames. In the other great educational centres of the colony a start in this direction has been already made.

## REPORT OF THE DIRECTOR OF THE ELAM SCHOOL OF ART.

I have the honour to report as follows on the work of the school during the year 1901:—

There were four terms of ten weeks each. For the first three terms eight classes were held each week, as in the preceding year, while during the fourth term three additional classes were established. There were 8,327 attendances of two hours each registered during the year, and, as this number represents attendances at day classes only, the result may be looked upon as satisfactory. A number of new students joined the school during the fourth term, while many of the old students took advantage of the opportunity to attend more frequently on the additional days.

I am glad to say that the number of teachers and pupil-teachers attending the school increased considerably during the year. I am quite sure that more good can be done by this school in educating the teachers, and in teaching them how to teach drawing and kindred subjects, than by teaching individual students. I should be very glad if the local Board of Education could see its way to offer some inducement to its teachers to attend here for a few terms, in which case I should be only too pleased to arrange special classes for their benefit. There is, I am glad to note, a marked improvement in a large number of the drawings by pupils of public schools that come before me each year, which, I believe I am right in saying, is to be attributed directly to the influence of this school on the teachers and pupil-teachers who have attended it. Old-fashioned methods are gradually disappearing, for the teachers who attend the Elam School of Art are taught not only how to draw, but also how to teach drawing to others.

In connection with the Science and Art Examinations of the Board of Education, London, the following results were obtained: Perspective, 3 passes, 0 failures; painting from still life, 5 passes, 0 failures; drawing in light and shade, 8 passes, 3 failures; model-drawing, 16 passes, 2 failures; freehand drawing of ornament, 13 passes, 7 failures; blackboard drawing, 9 passes, 1 failure; drawing from the antique, 6 passes, 0 failures. Sixty passes out of seventy-three papers cannot be looked upon as unsatisfactory when it is remembered that the standard examinations in freehand, model, and light and shade have been very considerably raised during the last two

The students generally have worked willingly and well, many coming early and working late and not limiting themselves to the nominal class hours; the school is open continuously from 9 a.m. till 5 p.m.

On the whole, I have every reason to be satisfied with the work done during 1901.

E. W. Payton.

#### TARANAKI.

## REPORT OF THE INSPECTOR OF SCHOOLS.

I am pleased with the rapid strides made in handwork. In a number of schools recognition under the Manual and Technical Instruction Act has been asked for. In many others the work has been carried on without such recognition, and many of the teachers have provided the necessaries for the work out of their own earnings. Free-arm drawing cannot be satisfactorily introduced unless at some expense for appliances; the slates which are used, and by some teachers used well, being only a makeshift substitute. Brush-work in many of the schools is displacing drawing, and the progress has been very satisfactory. Last year a grant was given by the Department for the instruction of teachers in the work for school classes, as indicated by the regulations under the Manual and Technical Instruction Act, and when classes were established I was more than gratified at the interest taken in the work, about one-half of the teachers of the district being enrolled. The examinations at the end of each term were very satisfactory, and certificates were issued on the results.

#### WANGANUI.

## REPORT OF THE BOARD OF EDUCATION.

Technical Schools.—The technical schools at Wanganui, Palmerston North, and Hawera are in full operation. The Wanganui School is now made use of for teaching science and other subjects to the pupils of the Wanganui District High School. Classes are also held in connection with the City and Guilds of London for plumbing, &c. The art classes are also continued as usual; so that the school is not only doing useful work, but under the remodelled staff, referred to in my last report, is in a much more satisfactory condition. The schools at Palmerston North and Hawera are both suffering from want of proper accommodation. The Board has been advised of a grant for the purpose of erecting suitable rooms at Hawera, and the work will be proceeded with at once. At Palmerston North, however, where there are good classes, a building has still to be rented, which is not only unsatisfactory from a financial point of view, but the accommodation itself is quite unsuitable for the work which is required. The Board therefore trusts that the Department will at once see that steps are taken to provide a suitable building for this important institution.

Kindergarten Classes.—By the courtesy of the Wellington Education Board three of this Board's female teachers were sent to Wellington to study the kindergarten system at one of the Wellington schools. The instruction thus received, combined with that given at the late Wanganui Summer School, under the direction of the Board's Chief Inspector, has enabled some of the teachers to obtain a fair grasp of the system, and as soon as materials are supplied by the Department the work will be commenced without delay.

#### REPORT OF THE INSPECTORS OF SCHOOLS.

At Palmerston the high-school classes are worked in the closest connection with the technical classes. In Wanganui and Hawera we shall take care to make the connection even closer. In our opinion, all the scholastic institutions of the colony should be so correlated and co-ordinated that as little lapping as possible will take place, and each grade will be bound to all others by many links. We are hoping for the day when the idea that a boy or girl having passed all the standards has finished his education will be rooted from the minds of the community, and will be supplanted by this other, that till a boy or girl of our towns has passed sixteen or seventeen his education should continue. The aim of education should embrace the three ends—the good man, the good citizen, and the good workman; and, as the primary schools can but prepare the way for attaining these, technical and secondary schools should be called on to perfect their work.

# WELLINGTON.

## REPORT OF THE DIRECTOR OF THE TECHNICAL SCHOOL.

#### PRIMARY INSTRUCTION.

The primary syllabus being under revision by the Department of Education, progress in drawing is practically at a standstill, the work being mainly on the level of past years. Increased activity in the direction of hand and eye work is generally manifest throughout the district, and when the departmental regulations are issued progress will be rapid, for the groundwork is gradually being prepared for a combination of drawing, brush-work, modelling, &c., in the various standards.

# First-grade Drawing Examination.

In this examination the following were the results: The number of papers worked was 6,290: passed, 3,664; failed, 2,626. Of these papers, 722 were taken by schools not under the Wellington Board, and 511 passes were recorded. It has been decided to discontinue this examination and to substitute inspection. This is of the highest importance, and will enable the evils of preparation for a special examination to be checked, and a more practical and sounder method of instruction adopted. The members of the Technical School staff in visiting the schools will be enabled to advise teachers as to the best methods of instruction, and at the same time value the drawing on behalf of the Board's Inspectors. Scholars holding three certificates in drawing may be examined in the remaining subject, in order that they may complete their full certificate. In all cases the examination will be conducted personally by the officer appointed to visit the schools. This method will ensure sound progress in the development of the new syllabus of work to be shortly introduced.

## Domestic Economy.

Cookery classes, under the instruction of Miss Ivey in the Wellington Centre, Miss Millington in the Wairarapa and Forty-mile Bush, have been continued throughout the year.

At the Wellington Centre the total number receiving instruction was 241, and in the Waira-

rapa and the Forty-mile Bush, 290.

One of the difficulties connected with the above classes is the irregularity in attendance, particularly towards the end of the year; this considerably reduces the financial assistance rendered by the Government. The irregularity of attendance is mainly caused by the children preparing for scholarship-work and leaving school after the annual examination. The general progress has been of a satisfactory character. The Wellington Gas Company generously donated the sum of £25 towards these classes.

## Primary Drawing Free Studentships.

The work of the sixty-two scholars holding free studentships has been satisfactory. The boys' course of manual instruction has been considerably improved. The scholars manifest a keen interest in this branch of the work. The girls' course included light and shade and colour work, as well as clay-modelling. Useful work is being done in this section, which acts as a connectinglink between the primary and the technical schools.

The number of competitors continues to be as large as in former years, 182 competing for fifty These free studentships will in future be awarded to the city and suburban schools upon the basis of attendance. For the twelve second-year free studentships there were twentyfour competitors. The above are awarded to holders of first-year studentships, the work of the past year being taken into consideration, as well as the results of the second-grade drawing examination.

#### Instruction to Teachers and Pupil-teachers.

These classes have been continued as during the previous year, perspective, model, freehand, light and shade, blackboard-work, and colour being the main features of instruction. The work done in perspective and model-drawing was fairly efficient; the freehand and blackboard drawing showed lack of interest, particularly the latter subject, which is generally considered a trial by junior teachers. If those in attendance would only try to appreciate the great advantages this work gives them in ordinary class-teaching there would not be the present tendency to shirk the same when possible. The more advanced classes have kept up their efficiency.

During the year special preliminary courses of work were given in clay-modelling, cardboard-modelling, and brush-work. These subjects will be enlarged upon during the present year, and special courses of lectures delivered relating to the teaching of drawing and kindred subjects in the standards. A special class in manual training in wood was established during the last six months of the year, but the indifference displayed and irregular attendance of the majority compelled its being discontinued. The teachers of this district will in time to come seriously regret their attitude regarding this work. It simply means that this district will be hopelessly behind in educational advance. Classes in drawing were also held at Pahiatua, Carterton, and Masterton during the year.

#### Technical Instruction.

The average number of students attending the several classes was as follows:-

The average number of students attending the several classes was as follows:—
Central Technical School: Day classes—Design, 24; drawing and painting (whole-day students), 17; drawing and painting (half-day students), 42; geometry and perspective, 10; secondary-school scholars (drawing), 29; secondary-school scholars (manual instruction), 12; primary-school scholars, 45; teachers and pupil-teachers, 124; wood-carving, 20; manual instruction (Saturday class), 9; advanced geometry, 7; clay-modelling, 25; cookery, not including primary schools, 17. Evening classes—Architectural and building construction, 26; mechanical drawing, 52; drawing, 73; life class, 7; practical plumbing, 34; theory of plumbing, 21; wood-carving and modelling, 27; mathematics, 15; joinery and carpentry, 18; design, 10; geometry and model, 69; arithmetic, 15; electric lighting, 16; book-keeping, 22; Latin, 8; English, 6; shorthand, 46; typewriting, 11; practical mechanics, 13.

shorthand, 46; typewriting, 11; practical mechanics, 13.

Country Technical Classes: Pahiatua—Drawing, 17. Masterton—Drawing, 7. Carterton— Drawing, 11.

# REPORTS UPON CLASSES.

Drawing, Painting, and Modelling.—The work in the day classes has been fairly satisfactory. The usual difficulty, want of interest and serious study, will, I suppose, always be with us in the colony; where a bazaar or a picnic intervenes serious work is completely set aside by a number of our students. In the more-advanced sections of antique, still life, and drawing from the life, better work has been done all round, and a higher standard obtained. Modelling has been continued as a part of the school course; but, unfortunately, the value of this work is not by any means sufficiently appreciated by our students. Apparently the aim of a large number of students is to do only such things as show immediate and pretty results; it is the same old story of "paint" —anything to show a result—the serious question of knowledge being altogether set aside. If our students would only realise the advantage to be gained from a knowledge of form obtained by students would only realise the advantage to be gained from a knowledge of form obtained by modelling the room would be crowded daily, particularly should this be so in connection with students of the life and antique classes. I would again urge the necessity for students practising memory drawing away from the school. The mere making of an accurate copy of a cast, model, or object is in itself of little importance. An effort has been made during the year to lead students in the direction of original work in black and white for illustration purposes, and also of the application of the life-class work to decorative design. The original black-and-white drawings recently presented to the school have proved of great advantage to this section. The evening classes are, in the matter of interest and hard work, the opposite of the day classes—the work is earnest and painstaking throughout.

Plane and Solid Geometry and Model-drawing.—This class has been largely attended throughout the year, and the results obtained are particularly satisfactory. The course will be revised in order that the application of the work to modern requirements may be made more effective. Students are now realising the advantages of going through such a course of study, and little difficulty is found in persuading students to adopt this work as a sound basis for future instruction.

Design.—This class has suffered from the absence and finally the resignation of the instructor. The work was carried on temporarily by Miss Kimbell until the end of the year. The Committee decided to obtain the services of an experienced instructor in design and modelling from England. It is hoped that considerable impetus will be given under the new conditions to design and its application to modern requirements.

Wood-carving.—The attendance compares favourably with that of past years. Several of the students have turned out excellent specimens of work, and both day and evening classes have done good work. There is a general tendency for students to rely too much upon the instructor for the drawing of the design. I would rather each student drew and modelled the piece of work he proposes to carve instead of relying upon the instructor for each individual part of the work done. These students would find an increased pleasure and profit in their work. It is all very well to carve, but a different thing to draw or conceive a design. There is an insufficient amount of drawing and modelling done in this direction. I only regret that, for financial reasons, it cannot be made compulsory. be made compulsory.

Mechanical Drawing and Machine-construction.—The class has maintained its position with regard to the numbers of students in attendance, and has done good work. It was found impossible to give sufficient attention to the large number present within the time. The Committee, therefore, has obtained a qualified assistant, who will instruct the junior members of the class. The question of models and apparatus, which has hitherto been a serious difficulty, is now being gradually overcome by the Department's aid. A course of lectures upon steam was given in connection with this work to the whole class; it has been deemed advisable to increase the course to twenty lectures ton in each of the general and third question. to twenty lectures, ten in each of the second and third quarters. I regret that as yet we are unable to provide a workshop course for students. Negotiations are still proceeding, and I trust we shall before long see this much-to-be-desired work put in hand, and thus enable us to give the students a thorough course of work dealing with the principles and practice of mechanics, mechanical drawing, and construction.

Practical Mechanics.—This class was established at the commencement of the year, under Mr. C. E. Adams. I am disappointed that greater advantage has not been taken of this most necessary and all-important work, without which it is hopeless to expect success. finding the evening work in conjunction with his other duties too arduous, resigned his position. Mr. W. S. Mackenzie, formerly Lecturer upon Engineering to the University of Adelaide, has been

appointed to succeed him.

Electric Light and Power Distribution.—Steady progress has been made in this class. We are again indebted to the Electrical Syndicate for the loan of appliances. The grant under the Technical Instruction Act has enabled me to place an order for the supply of apparatus which will enable practical work to be done during the present year, one night being devoted to practical work, and one to class demonstration. One of the difficulties of the instructor is the want of a knowledge of mathematics in the majority of the students presenting themselves. Every inducement is offered to students to take up this work; it is only a question of time when compulsion will take the place of persuasion. Want of accommodation in all classes in the Engineering Section is becoming a serious matter; provision at no distant date will be required for expansion.

Building-construction.—The progress of this section is all that can be desired. The attendance at the class is steadily increasing, and additional accommodation is urgently needed. Models and appliances have been obtained under the Technical Instruction Act, and the work considerably

strengthened by their aid.

Carpentry and Joinery.—I should very much like to see an improvement in the number of apprentices in attendance. The works on construction in the library, together with the drawing

and shop practice, afford students every possible facility for progress.

Plumbing, Theory and Practice.—The number of students and the attendance at these classes continue very good. As in former years, a number of apprentices and younger workmen again attempted the examination in the hope of obtaining a certificate, but failed to reach the necessary standard. A two-years' course of work is a necessity if success is to be obtained. The City and Guilds of London have made it compulsory that candidates shall present themselves in theory as well as in practice at the same examination. The theoretical work has been continued as formerly; additional apparatus and illustrations have been provided. A good attendance continues to be maintained. The absence of a sufficient knowledge of arithmetic, and, I may say, general education, is one of the serious drawbacks this class suffers from; thus the course of work is considerably lengthened by the want of general knowledge. For the above reason the course has been divided into two sections, an elementary and an advanced; by this means it is hoped to obtain more effective work. Owing to the difficulty of finding accommodation, the class has now to be held in the cookery-room. Application has been made to the City Council for a continuance of the aid formerly given.

Mathematics.—The attendances have been fair during the year, though the number on the

roll has not been large.

Shorthand and Typewriting.—All classes have proved successful, and good work has been done A considerable number have left the school to take up permanent positions in various Students have the advantage of dealing with the office correspondence daily. In conneccity offices. tion with the examinations I should like to see a Colonial Board of Examiners appointed by the Government for the control of this work. As now conducted, under Messrs. Pitman and Sons, the examination is unsatisfactory, particularly as regards the length of time between the examination and the receipt of results.

Arithmetic.—This class has considerably increased in numbers. It is highly essential that all students of technical classes should be well grounded; it is therefore a pleasure to see the steady

increase, which means greater efficiency in the more advanced and special instruction to follow.

Latin and English.—The English section has slightly increased in numbers. The Latin has decreased. This is not to be wondered at, considering the modern tendency to disregard Latin, several of the English colleges having now dispensed with this subject. The success of the students in the Matriculation and Civil Service Examinations has been very gratifying to all concerned.

Book-keeping.—The attendance of the past year has been steadily maintained. It had been

decided to establish an advanced course of work in this branch of the school's work.

Wellington College and Girls' High School.—In the former institution the work has been ed on as formerly. This work is still, however, considered an "extra" in the upper forms, carried on as formerly. This work is still, however, considered an "extra" in the upper forms, and is held out of school-hours, and at a special fee. Until these disabilities are removed success can never be expected. The work must be a part of the school's ordinary course, taught within school-hours, and without extra fee, as is the case of the lower forms. In the Girls' High School the work, I am glad to say, is given in ordinary school-hours, and, although the time allowed is short, nevertheless it is a beginning in the right direction, and I hope later to see an excellent course of lessons developed in the various sections of the work throughout the school.

#### ARTS AND CRAFTS GUILD.

The following are the objects of the guild: To assist in cultivating among art and craft students a friendly and social spirit; to exhibit at meetings of the guild illustrations in any medium of a subject or subjects chosen by the Committee, together with miscellaneous sketches and studies, and craft workmanship in embroidery, bookbinding, applied ornament in gesso, metal, carving, or other decorative forms, lithography, lead-casting, stained glass, Ac.; to encourage the reading of papers and essays, and the delivery of lectures on subjects relating to art and craft, to be followed by discussion. The past year's work shows that, whilst the meetings have been generally successful and the membership large, the main objects of the guild have not been reached. The interest rather lay in still life and landscape, with a certain amount of study from the living model and a little of the craft work. It was therefore decided to reduce the membership, abandon the monthly meetings, and adopt a quarterly meeting with exhibits of practical work. Up to the present the results have been more satisfactory. The life model is posed for a definite subject, stained-class designs are practically carried out, modelling life model is posed for a definite subject, stained-glass designs are practically carried out, modelling is done for a purpose, still-life work for decoration, &c. The Art Needlework Section has already done excellent work. The Architectural Section is also fully alive to the aims of the guild; several meetings have been held and a definite course of work put in progress. The Photographic Section has also come to life again. The prospects are therefore brighter than they have ever been, and I anticipate some real results from the new arrangement.

## PLUMBERS' EXAMINATIONS.

The Board of Control is constituted as follows: J. R. Blair, Chairman of the Board of Education; A. D. Riley, Director for Technical Instruction; W. Rounthwaite, City Engineer; J. Barry, representative of the journeymen plumbers; J. F. Adams, representative of the master plumbers. Mr. Ramsay resigned during the year, Mr. Barry being elected by the Union of Plumbers to fill the vacancy. The Board has met several times during the year, and dealt with matters affecting the conduct of examinations and other subjects connected with the general work of sanitary classes conducted by the school. There can be no question of the value of such an advisory body in connection with this very important work. in connection with this very important work.

## EXAMINATIONS.

The usual examinations have been held during the year. In the higher-grade work there has been a considerable diminution of candidates, practically only those who found it necessary to present themselves for teaching or trade certificates coming forward. Wherever possible, students

have been dissuaded from taking these examinations unless certificates are especially required.

The number of papers examined during the year was 6,835. The number of certificates issued was 3,994.

Second Grade (Local).—The number of students who passed in the several subjects of examination was as follows: Freehand, 113; geometry, 33; perspective, 15; model, 79; memory and blackboard drawing, 10; light and shade, 20; brush-work, 6.

Third Grade (Local).—Of the 66 candidates examined 45 passed.

Board of Education, South Kensington.—The results of the examinations held under the above Board of Education, South Rensington.—The results of the examinations held under the above Board have not yet been received; the delay in this matter is a serious objection to the examination under this Department. The constant alterations in the syllabus, of which we receive no intimation until the month the works are required to be forwarded, is a further objection. I would urge the adoption of a Colonial Examination and a Colonial National Competition of Art Works, on the lines of the present English competitions. By this means the schools will be brought closer into touch with each other, the results will be quickly obtained, and greater efficiency secured.

CITY AND GUILDS OF LONDON INSTITUTE FOR THE ADVANCEMENT OF TECHNICAL EDUCATION.

The examinations under this Department have been conducted as usual. Twenty-three candidates presented themselves for examination, of whom 13 passed, as follows:—Plumbers' work: Honours grade, 1; ordinary grade, 1; preliminary, 2. Electric Lighting: Honours grade, 1; ordinary, 2; preliminary, 5. Lithography: Ordinary grade, 1; preliminary, 1. Mechanical engineering: Ordinary grade, 1. The examinations in connection with this institution are mostly in two grades—(1) Ordinary, (2) Honours. In some subjects a preliminary examination is held. The Ordinary Examination is intended principally for apprentices and journeymen; the Honours Examination for foremen, masters, managers, and teachers. Candidates may enter for either grade except in certain subjects, in which they are required to pass in the ordinary grade first. Candidates may obtain a first or second class in either grade. If a second class is obtained they may sit again for the higher classification. In plumbers' work candidates must present themselves for theory and practice in the same year. The examinations are held in May.

#### LIBRARY.

The number of volumes contained in the library is as follows: Fine arts, 373; architecture and building-construction, 188; mechanical, 232; general, 512. The number of works from the lending branch taken out by the students during the year was 957. The library is much valued by all sections of students. The space set apart for readers is too small, and the space for works exhausted. Another objectionable feature is that the office and library being combined leads to serious interruption of the office duties.

#### EXHIBITIONS AND LECTURES.

An exhibition of French and English posters, kindly loaned by Messers. Cowan and Co., together with illustrations of colour-printing methods supplied by the London *Graphic* and by Messers. Turnbull and Palmer, of Wellington, was held in June, and attracted considerable attention. Lectures upon photography were delivered by Messers. Gifford and Pringle in connection with the Arts and Crafts Guild.

#### VICTORIA COLLEGE LABORATORIES.

The College chemical and physical courses are held in Rooms Nos. 5 and 6 on the first floor of the Victoria Street building. Advantage has been taken of this course by several technical students. I have suggested the recognition of the University College by the City and Guild of London, in order that students may qualify in the laboratories of the College for certain science subjects, and thus be enabled to dispense with the English examinations.

## MANUAL AND TECHNICAL INSTRUCTION ACT.

The above Act has greatly relieved the finances as affecting the Technical School. A sum of £362 was granted towards apparatus and material for the year, enabling several of the classes to be equipped with very necessary appliances, and considerably increasing the efficiency of the work. The result of the year's work is still a financial loss to the Board, but this is mainly owing to the fact that outstanding amounts due by the Department cannot be paid to our credit in time for the close of the year's accounts on the 31st December.

#### EXTENSION OF WORK.

Increased accommodation is an urgent necessity, and I sincerely hope that the City Council will, now that the Board has decided to come under the "associated classes" clause of the Technical Instruction Act, see its way to assist with the necessary grant of land and funds. During the past year I have found considerable difficulty in accommodating the number of students enrolled. In addition to this, urgent workshop accommodation is required on behalf of the mechanical engineering, plumbing, carpentry and joinery, and pattern-making classes; and class-rooms for electricity, building-construction, &c. The library, owing to want of accommodation, cannot be properly arranged, and is overcrowded, whilst the office arrangements are most inconvenient. The long hours, 9 a.m. to 9 p.m., during which the classes are held, has necessitated the appointment of Mr. H. Bastings as assistant to myself in the general control of the classes.

# WELLINGTON CITY COUNCIL.

A special committee of the Council has been set up to consider what steps may be taken to assist the cause of technical education. Representatives of the committee have met the representatives of the Board's Technical Instruction Committee and the Industrial Association representatives, but up to the present no decision has been arrived at; this, however, is, I trust, only a question of time, and I hope shortly to report progress of a satisfactory character.

#### WELLINGTON INDUSTRIAL ASSOCIATION.

The committee appointed by the above association has visited the classes during the year, and has contributed a sum of £25 towards the funds of the school. The association, as stated above, has a representative upon the joint committee set up to deal with the question of the school's extension and its management. The free studentships given on behalf of the association have been continued as formerly.

#### STATEMENT OF RECEIPTS AND EXPENDITURE.

	R	eceipts.		£	s.	d.	Expenditure.	£	8	١.	đ.
Fees received		*		1,370	15	1		. 2,37	79 1	4	1
Government capitation				843	0	11		. 26	33	7	1
Government grants	٠.			559	10	5		. 10	3	8	3
Government subsidies	$\mathbf{n}$	voluntary co	ontri-					. 19	1	5	0
butions				152	0	0		. 54	2	7	1
Voluntary contributions	3	• •	• ~	118	17	0	Sundries	. 27	7 :	3 2	10
				64	11	4					
Debit balance		• •		648	10	7					
										—	_
				£3,757	5	4		£3,75	7	5	4

The following statement of accounts will give a fairer idea of the financial position for the

year:—	Rec	ceipts.		£ 3,108	s. 14	d. 9	Expenditure.	£ £3,757	s. d. 5 4	
Outstanding claims— Cookery Sundry amounts				504 156	15	0 8		·.		
			ě	£3,770	0	5		£3,757	5 4	Į

## REPORT OF THE INSPECTOR OF SCHOOLS.

In many details of school-work marked improvement is apparent—such as in paper-folding and the substitution of plasticine for clay in modelling. Our Saturday classes for teachers afford very useful help in the teaching of some special branches of manual training. Formerly practical lessons in science were given to teachers, and other very helpful training afforded until the grant-in-aid ceased. Twenty years ago I reported as follows: "In comparatively few schools is the work that of a teacher trained for his profession. The contrast between a school working with good methods and that of a school under an untrained or an unprogressive teacher is very great. It surely must be an established truth in educational as in other matters that if work is to be done it should be well done; and to attempt to work without skilled labour simply means that it will be imperfectly done." These words are true to-day in too many instances. The best educational system will not turn a bad school into a good one, nor will it make any school the best that it might be. Only the skilled teacher can do that, and hence the importance of the best selection of teachers, and of a training which, coupled with personal influence for good, will fit them for their special duties in life.

#### MASTERTON TECHNICAL SCHOOL.

Statement of	Receints	and	Expenditure	for	Period	endina	31st	December.	1901.

					,			
Receipts.		£	8.	d.,	Expenditure.	£	s.	d.
Balance from year 1900		10	16	11		266	16	0
Class fees for 1901		103	12	6	Carpentry, painting, gas-fitting, and sign-			
Balance of capitation for 1900		6	5	6	writing	46	<b>2</b>	
Voluntary contributions		119	7	6	Insurance and furniture	5	18	6
Government subsidy on voluntary co	ntri-				Materials and tools for dressmaking and			
butions	• •	116	8	6	woodworking classes	4	16	
					Rent of shed for woodworking class	5		0
					Sundries	22		
					Credit balance, 31st December, 1901	5	9	7
					-			
		£356	10	11	£	356	10	11
				===	=		_	==

20th January, 1902.

N. D. Bunting, Secretary and Treasurer.

#### HAWKE'S BAY.

## REPORT OF THE BOARD OF EDUCATION.

Technical Work.—A hall immediately adjacent to the Training School was purchased at the beginning of the year to meet the growing needs of that school till other and more suitable premises could be obtained for the conduct of technical work. The half of this hall was set apart for technical classes under a qualified instructor, while the whole school was given up on Saturdays for the conduct of technical classes for teachers. This arrangement has met a very great need, but cannot in the nature of the case be anything more than temporary. Suitable buildings for the conduct of classes in technical subjects are a real desideratum.

# REPORT OF THE INSPECTOR OF SCHOOLS.

The opening of technical classes by the Board for the benefit of teachers shows how alive the teachers themselves are to gain an insight into those aspects of art and science that are daily forcing themselves into recognition as subjects of instruction in the public school. From the remotest part of the education district teachers have come to attend the classes in Napier, Gisborne, and Dannevirke, at heavy cost; and, although six months have passed since the classes were first established, there is no sign of slackness or loss of interest in the work that is being done for the future benefit of education in the schools of the district. The Technical School, under the direction of Mr. Anderson, is continuing to do some good work, and its influence is beginning to be felt in the schools of the district. The plan of holding an annual examination in drawing for all the children at the same time bids fair to be very successful. Some of the schools show excellent work, and the efforts made in original-design, brushwork, and advanced model-drawing are very suggestive as to the possibilities in the way of economic training in this direction.

# REPORT OF THE MASTER OF THE TECHNICAL SCHOOL.

The following classes were held during the year:—Teachers' class: Instruction was given in model-drawing, design, and geometrical drawing. The discontinuance of the fee charged (rendered possible by the special grant made to the Board of Education by the Government for the training of teachers) and the issue of railway passes to country teachers caused a large increase in the attendance at the class during the year. General evening classes: Instruction was given in light and shade, mechanical, geometrical, and scale drawing, model-drawing, and modelling in clay. The average attendance was eighteen. A special class for applied mechanics and mechanical drawing was held during the third quarter. No application for recognition or claim for capitation was made, as the class was established as an experiment. The class was very successful, but the instructor (Mr. James) was unfortunately removed from Napier, and it was found impossible to obtain another sufficiently qualified to take his place. A class was held on Saturday afternoons for painting and sketching from still life, from nature, and from life for advanced students; the class was small, but the students were enthusiastic, and good work was done. Instruction in model-drawing, light and shade, design, &c., was also given throughout the year to teachers in training at the White Road School; the average attendance was nine, and satisfactory results were obtained.

Napier Main and Port Ahuriri Schools: Instruction was given during the year in model-drawing and design.

Napier Boys' High School: Instruction was given during the year in model-drawing, design, woodwork-drawing, and light and shade, with satisfactory results, considering the short time given to the work. A class for practical woodwork was held for two hours in each week.

In conclusion, the work of the year shows an advance on that of last year; indeed, there has been a steady increase in the scope of the work since the establishment of technical classes in Napier in 1899.

R. N. Anderson.

#### NELSON.

#### REPORT OF THE INSPECTOR OF SCHOOLS.

The year has been an eventful one in many ways, especially in the encouragement given by the Department to manual training. Early in the year special grants were made for the encouragement of manual and technical training. Instructive lectures were given at three different centres by one of the organizing Inspectors, and classes for the instruction of teachers have, at the expense of the Department, been carried on in Nelson. School classes in the following subjects have, before the close of the year, been authorised: Kindergarten manual exercises, modelling, brushwork, dressmaking, cookery, ambulance, and swimming and life-saving—and almost all are now in operation. For each of these, except the cookery class for girls in Nelson City, the instructor is the class or school teacher who was previously in the service of the Board.

#### GREY.

#### REPORT OF THE INSPECTOR OF SCHOOLS.

Towards the latter part of the year the district was visited by Mr. Isaac, one of the Inspectors appointed under the Manual and Technical Instruction Act, who gave some instructive lectures on the various subjects under his charge. By permission of the Board these were attended by the majority of our teachers, many of whom evinced considerable interest in the subjects dealt with. Excepting the carpentry class at the Greymouth District High School, manual and technical instruction have found no place in our schools. There is now reasonable hope that the work of Mr. Isaac will bear fruit, and that we shall see during the coming year at least one branch introduced in several of our schools.

#### WESTLAND.

#### REPORT OF THE BOARD OF EDUCATION.

Manual Instruction.—Although instruction in handwork has not during the year formed a prominent feature of the syllabus, preliminary arrangements have been made for its general introduction. All the teachers and pupil-teachers, with the exception of those of South Westland, attended, at the invitation of the Board, a series of lectures by one of the Inspectors appointed by the Education Department under the Manual and Technical Instruction Act. The necessary material and books will be provided as soon as they are obtainable.

# REPORT OF THE INSPECTOR OF SCHOOLS.

The introduction of handwork has been delayed owing to a lack of familiarity with suitable methods on the part of the teachers, and to the difficulty in obtaining promptly a supply of the necessary material. A visit of an Inspector appointed under the Manual and Technical Instruction Act has so far prepared the way as to excite the interest of the teachers, and to impress upon them some of the principles upon which the instruction is based. During the present year it is expected that a course of handwork will be instituted in at least the lower classes of a majority of the schools

#### WOODWORK CLASS, KUMARA PUBLIC SCHOOL.

This class is under the instruction of Mr. G. A. Bell, and at the end of the year consisted of twenty-one pupils, the majority of whom are pupils of the school. The class met each afternoon for one hour after the close of the school. The course of instruction consisted, as in previous years, of special exercises in woodwork and the construction of various articles. The students connect their practice with drawing so far as to use the compass and pencil intelligently in setting out their work, but no other connection is maintained with the drawing forming part of their school course. The instruction generally is efficient, and the interest of the students is well maintained.

# NORTH CANTERBURY.

# REPORT OF THE BOARD OF EDUCATION.

Manual and Technical Instruction.—With regard to school classes, after carefully considering the whole question the Board arrived at the conclusion that while it was not desirable to introduce any of the subjects into the higher standards until the syllabus had been revised, yet that no modification of the syllabus was necessary up to and including Standard II. The Board has accordingly confined its attention to the introduction of manual subjects into the lower classes. The classes in woodwork have been continued at the Normal School and at Leeston, at which latter centre steps have been taken to establish a class in ironwork. The cookery classes at Doyleston have also continued in operation. During the last term of the year woodwork classes under Mr. Sandford, and technical classes under Mr. Just, were held at Lyttelton. The report of the instructor shows the number of pupils who have attended the woodwork classes during the year, together with the attendances for each quarter. During the year, in order that teachers

might prepare themselves for giving instruction to their pupils, the Board has paid the fees of a large number of teachers in attendance at approved classes in manual and technical instruction. At the date of this report about three hundred teachers are attending the several classes at the Normal School, School of Art, and School of Domestic Instruction, in which connection it is pointed out that the Board's ability to continue free instruction must necessarily be limited by the amount granted by the Department for the purpose.

#### REPORT ON MANUAL-TRAINING CLASSES.

Classes have been formed at Lyttelton during the last quarter of the year, both during the afternoon for schoolboys and also during the evening for youths and adults. The classes at Leeston still show a good attendance. Mr. Anderson, the headmaster, has taken the classes during a large part of the year. Two public demonstrations have taken place at Leeston during the year, one by Mr. Anderson and one by myself, which will, I think, do good.

In accordance with instructions I paid a visit to Ashburton, and addressed a meeting at Hampstead School. Mr. Brock and his assistants had organized a demonstration of handwork, showing work of all the standards, which, together with a small exhibit of woodwork from the Christchurch classes, made up a most interesting exhibit. Judging from the support given to the exhibition, the people of Ashburton are in earnest in their endeavour to get woodwork classes started.

Several teachers from outside districts have applied to me for information, which I have given, so far as it applies to fitting up workrooms for manual training. The Normal School classes have kept well up to the numbers of previous years. The work has been good, also the discipline. The drawing reflects great credit on the teachers in the service of the Board. Since my last report the secretary of the Jubilee Industrial Exhibition has forwarded to me, on your behalf, a gold and a silver medal and a certificate for the exhibit of manual training (woodwork), representing first, second, and third places. Some of the tools and benches are beginning to show the effects of the

past four years' work, but they have not shown the wear which I anticipated they would.

The following list will, I hope, show you something of the year's work:—

The number of pupils who attended woodwork classes at the Normal School were:—Boys and youths, 160; teachers, 47: at Leeston—boys and youths, 27: at Lyttelton—boys and youths, 30; adults, 10. F. W. SANDFORD, Instructor.

# REPORT OF THE CANTERBURY COLLEGE BOARD OF GOVERNORS.

#### School of Engineering.

Attendance.—During the year the work of the school has been carried on with difficulty, the existing accommodation being altogether overtaxed. One hundred and ninety-two students attended lectures, whilst the total hour attendances per week amounted to 997, being an increase of 50 per cent. in the number of students and nearly 70 per cent. in hour attendances as compared with last year.

Engineering Laboratory.—There was a marked increase in the number of tests made as compared with the previous year. Tests were made on axles, for the New Zealand Government Railways; oil, for the Union Steamship Company; building-materials, for the School of Engineering, School of Art, Public Library, and the Cathedral; dumping-bands, for the Wellington Harbour Board; and boiler-plates, stone, concrete, and cement, for local firms.

Apparatus.—During the year a large quantity of apparatus for the experimental teaching of applied mechanics was added to the plant. This apparatus was made in Christchurch from drawings prepared by students of the school. A large quantity of electrical apparatus for the equipment of electrical laboratories has also been acquired.

Buildings.—The erection of the new electrical laboratories and lecture-rooms has progressed slowly during the year. On their completion the school will compare favourably, both as to accommodation and plant, with any of a similar character in the Australian Colonies.

Of the students attending evening classes, 4 obtained first-class and 10 second-class certificates in elementary steam; 6 obtained first-class and 5 second-class certificates in elementary applied. mechanics; 7 obtained first-class and 10 second-class certificates in mechanical drawing; 11 obtained first-class and 9 second-class certificates in freehand mechanical drawing; 14 obtained first-class and 11 second-class certificates in descriptive geometry and satisfied out work; 1 obtained a second-class certificate in elementary applied mechanics and mechanics of machinery; 1 obtained a first-class certificate in strength of materials; 1 obtained a first-class certificate in the steam-engine (advanced); 1 obtained a first-class certificate in applied mechanics; 1 obtained a first-class certificate in mechanics of machinery; 1 obtained a second-class certificate in theory of workshop practice; 1 obtained a first-class and 1 a second-class certificate in elementary electrical engineering; and 1 obtained a first-class certificate in pass electricity and magnetism.

ROBT. SCOTT, M.Inst.C.E., M.Inst.M.E., Professor in Charge.

#### School of Art.

As compared with 1900, the number of students in attendance has been as follows: For 1900—First term 247, second term 243, third term 240; and for 1901—First term 227, second term 233, third term 383.

Drawing and Painting.—The work in the different branches has maintained a high standard. The drawing from life, in black and white, was particularly successful. As the students have been devoting more attention to design for applied art work, the painting from still life, &c., has not received so much attention.

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Modelling, Casting, and Moulding.—The average attendance in all the classes combined has been seventy-nine—an increase of forty-eight over that for the previous year. This increase is due mainly to the State-school teachers, who have very largely taken up this subject for school-work, under the new Technical Act. Their work has been of a special character, suited to kindergarten and the standards. The general work of the other students has been from the cast and nature studies. In a few cases it has reached a high state of excellence. Various methods of moulding and casting have been practised.

Wood and Stone Carving.—I am able to report more favourably of this class than previously. Under the new instructor the work has decidedly improved, though only elementary work is yet

done. The attendance, though better than the former year, is still small.

Repoussé or Beaten-metal Work.—This class was started last year. Though few have so far taken it up, the work done is creditable, and as the art becomes better known it will become

Painters' and Decorators' Work.—The average attendance in this class has been twenty, the highest attendance since its establishment in 1899, and shows that the work is growing in favour with those for whom the class was founded. Hitherto the work has had to be carried on under extremely unfavourable conditions as to room and convenience. These have now been remedied by the provision of a special room, which is to be fitted up with every convenience. The students will thus be able to study all the different branches of their work under proper conditions. Advance should now be speedily seen, both in quality of work and in numbers attending.

Decorative Design.—The attendance in this class has for a long time been unsatisfactory, considering its importance. There is at last, however, a decided advance, which I hope will be permanent. The average for the year has been thirty-three. The work has been of the same character

Architecture and Building-construction.—The average attendance for the last two years has been twenty and thirty-nine respectively. The elementary division is answerable for this satisfactory increase, and it is likely to be more than maintained. I attribute the very marked advance to the appointment of an additional instructor for the elementary work, thus freeing Mr. Hurst Seager for the advanced.

Geometry and Perspective.—Considering the vital importance of geometry in so many industries, it is gratifying to note the very marked advance in attendance, the average for the last two years being twenty-seven and seventy-six respectively. This indicates that the value of this subject is being appreciated as it should be. The chief increase has been in the elementary (even-

ing) class, which has been placed under a new instructor, Mr. Thompson.

Scholarships (Canterbury Industrial Association).—Three scholarships were competed for in

December, entitling the winners to two years' free tuition.

Scholarships (Builders' Association).—Two are offered annually—one to those under twenty and over eighteen, and one to those under eighteen. The competition was held last March.

State School Scholarships.—An annual free studentship is given to the head boy in drawing in each school in the North Canterbury Education District having over 170 pupils. The number of free studentships awarded in 1901 was nineteen. The Board have recently decided to offer ten scholarships for competition amongst the girls of the State schools in the district—six to schools having not less than 400 pupils on the roll, and four to those having less than 400. They will entitle the winners to free tuition for one year in the morning class. The first competition is to be held shortly.

Free Studentships.—Seven free studentships offered by the Board for annual competition

on the past year's work were awarded.

Local Examinations.—The local examinations were held in December. The results are:-Second grade: Freehand—excellent 32, pass 40; model—excellent 32, pass 59; geometry—excellent 6, pass 3; perspective—excellent 2, pass 6; blackboard drawing—excellent 1, pass 4. Full second-grade certificates 5. Modelling—first class cond class 2.

Education Department of Great Britain (late Science and Art Department, South Kensington).

-The results of the examination held last June are not yet to hand. The extreme delay in

obtaining results increasingly deters students from entering.

New Buildings.—My reports for some years past have referred to the necessity for increased accommodation and convenience for applied work, none previously existing. I am pleased at last to be able to report that a beginning has been made to remedy these deficiencies. With the generous help of the Government, the Board has been able to erect two fine rooms, 46 ft. by 28 ft. The lower one will be used mostly for painters' and decorators' work; the upper one for wood and stone carving, and modelling and casting. A small room has been cut out of the upper one for the propose of a library, which will also supply a long-experienced want. With such improved condipurpose of a library, which will also supply a long-experienced want. With such improved conditions an impetus will be given to the work in these branches, and I trust that in time similar suitable provision will be made for other equally important subjects.

In reference to the library, in addition to the books it is intended to file the leading periodi-

cals in all the different industries and manufactures connected with the students' work.

G. H. Elliott, Headmaster.

# Girls' High School.

Technical Classes.—During the year an attempt has been made to bring the technical classes at this school under the Technical Act of 1900, in order to benefit by the subsidies in aid of such classes, offered by the Act. The two cooking classes and two dressmaking classes were accepted by the authorities in Wellington as in all particulars fulfilling the requirements of the Act; but it does not seem practicable for more than the upper drawing class to attempt the programme of work required. The swimming class is also eligible for a grant as far as provision for

instruction is concerned, but owing to the shortness of the bathing-season in Christchurch-considerably shortened again by the summer holidays—and the very limited and somewhat inconvenient hours, at which the bath—that at the Boys' High School—is available for use by the girls, the number who can make the required attendances is very limited.

#### REPORT OF THE SECRETARY, SCHOOL OF DOMESTIC INSTRUCTION.

The Committee, in making its eighth annual report, has pleasure in stating that the purposes of the association have continued during the year to be efficiently served. The school has been ably and successfully conducted, and there is good reason to believe that it exercises a valuable influence in the community.

As the special feature of last year's work was the large accession of primary-school pupils in classes taught on behalf of the Board of Education, so this year the number of general attendants has been swelled, especially in the last two quarters, by an increasing number of primary-

school mistresses anxious to qualify for a certificate of competence in cookery.

In the first quarter thirteen "school classes" were held, of which six were laundry classes, conducted by Mr. and Mrs. Coxon. In the second quarter the laundry classes were discontinued, and for reasons similar to those stated in last year's report only two schools were represented in cookery. In the third and fourth quarters the resources of the school were taxed to the utmost to provide for children's cooking classes under altered conditions of demonstration and practice, which were made essential by the Education Department in qualifying for the capitation payable under "The Manual and Technical Instruction Act, 1900." Indeed, the extension of the practice part of the work of instruction in the these classes made it impossible to provide for all schools desirous of sending a group of pupils.

In the second quarter two classes for teachers were formed, with a roll-number of twenty-one; in the third quarter the number of classes under this head was three, and in the last quarter five,

with a roll-number of seventy persons.

The general attendance during the four quarters ranged from 113 in the first quarter to 72 in the fourth. In the third quarter there were 103. The diminution towards the close of the year is to be explained partly by the amount of attention demanded in other departments of effort and partly by the approach of warm weather. In the coming year the "school classes" will again occupy a prominent position in the work of the school; but we trust the managers will not lose sight of the fact that this feature is in all probability not destined to be permanent, and that, while we are glad for several reasons to conduct classes for children, even at the risk of loss in the cost of instruction, the primary purposes of the association have in view the special interests of older pupils, who from the conditions of their daily life enjoy few opportunities of gaining a good practical acquaintance with housewifery, or who seek to improve their knowledge in one or more of its branches.

The following is the return of attendances for the several quarters of the year:-

			Nu	mber of Cla	sses.	Numb	er of Atten	dants.
Quarter.			Cooking.	Dressmak- ing.	Laundry- work.	Associated Classes.	School Classes.	Total.
(1) January-March	• • •		14	1	7	113	425	538
(2) April–June			11	1	• • •	106	60	166
(3) July-September			17	1		142	260	402
(4) October-December	•••	•••	18	1		142	258	400

In the matter of finance, the fees, capitation allowances, and partial refund of cost of material for the teachers' and general classes (termed "associated classes" under the Act) are sufficient to cover fully the cost of working, and have enabled us to act a little more liberally towards those employed in conducting the work of the school. In the "school classes," from the number of children engaged in practice, the cost of material forms a serious item of expenditure, and, as in this case there is no refund, the Education Department has been urged to increase the amount payable in capitation. We are glad to say that the request has now been complied with, and accordingly, as a temporary measure, under certain conditions payments on a higher scale will be made during the coming year.

During the year material improvements have been made in the accommodation provided. These include a new gallery for demonstration purposes, several additional stoves, increased table and shelf accommodation, and a substantial addition to the facilities for "washing up," while a considerable sum has been spent on new utensils. In these cases a refund of half the cost is made by the Education Department. The facilities for cooking classes are now good, but we have still to regret the absence of the means of reproducing common household conditions, and there is still room for much development in other features of home work, which in the economics of the house are almost equally important with cooking. Towards the close of the year a certificate examination of the students was conducted, as in former years, by Mrs. R. D. Harman, diplomée of the South Kensington School. Mrs. Harman's report which is again of a year qualifying nature. of the South Kensington School. Mrs. Harman's report, which is again of a very gratifying nature,

For the loss the association and the school have sustained during the year in the death of Mr. William Chrystall we have to express a deep feeling of sorrow. Mr. Chrystall had acted as honorary

treasurer continuously from the opening of the school, took a warm interest in its proceedings and and an active part in its management, and was ever ready with kindly advice and assistance, which his business tact and experience made invaluable.

## Report of Examiner.

Mrs. R. D. Harman, having held the annual examination in practical and theoretical cookery at the School of Domestic Instruction, has great pleasure in reporting a general and steady improvement in the technical work during the past year. The practical work was of very good quality, and the methodical way in which each student arranged her work so as to have all the test dishes cooked within the stated time showed great forethought and the practical efficiency of the training, the work altogether being well and carefully done. The theoretical work was excellent, showing that a greater interest had been taken in the details of the various branches of cookery, more intelligence being shown as to the cause and effects of the methods employed. The improvement in the working-conveniences of the class-room, owing to the new sinks, water-heater, increased number of stoves, kitchen utensils, &c., is most satisfactory, simplifying all work in a most noticeable manner, the scullery-work in particular showing excellent results owing to the improved arrangements. The number of certificates granted was nine.

Statement for Year ending 31st December, 1901.

		Receip	ts.					Expenditure,	
		•			£	s.	đ.	£ s. d. £ s.	đ.
Balance from la					77		6	Petty cash 56 10	1
Donations and	subscrip	tions			7	12	6	Rent 100 0 0	
School fees	••	• •	••		71		0	Less received from sub-tenant 21 0 0	
General fees		• •			154	10	2	<del></del> 79 0	0
Government gr	ants—							Cooking-material 161 4	1
General		• •	• •	• •	116		3	General expenses, including gas,	
Capitation		• •	••		205		0	coals, &c 121 11	7
Sales, &c.		• •	• •	• •	77	12	11	Salaries 267 1	3
								Advertising 7 7	6
								Bank charges 0 10	0
								Balance in bank 19 15 3	
								Less cheques outstanding 14 5 10	
								5 9	
								Cash in hand 11 15	5
					£710	9	4	£710 9	4
					~.10	9	_	£/10 9	_

O'BRYEN HOARE, Honorary Treasurer.

#### SOUTH CANTERBURY.

## REPORT OF INSPECTORS OF SCHOOLS.

So far the introduction of handwork in our schools has not been general; indeed, until a revision of the present standard syllabus has been made we do not think it would be wise to do much more than has been done. As it is, various kindergarten occupations have been taken up for the first time by the infant classes and Standard I. in some schools; and in the Timaru Main School and one or two others that have been doing good work in this direction for years past the instruction continues to be given with success. We are pleased to report that the teachers have been doing something to prepare themselves for taking up the work of instruction required for school classes under the Manual and Technical Instruction Act. During the last term of the year classes for the instruction of teachers were held in Timaru on Friday evenings and on Saturdays. The woodwork class for men was attended by forty-two teachers. The course extended to twelve lessons of two hours each, and the average number of hours attended was nineteen out of twenty-four. A class for instruction in kindergarten occupations, which included paper-folding, brick-laying, modelling in carton, mat-weaving, and cane-weaving, was conducted by Miss Avison, and was attended by eighty female teachers, the course being one of twelve lessons of one hour each, the average number of hours attended being almost ten. A course of twelve lessons of one hour each in brushwork and modelling in plasticine was given by Mr. William Greene. This was for teachers of both sexes, and was attended by 126 teachers. The class was so large that it was taken in two divisions, the lesson for each division lasting one hour, and the average time attended by each student was nine hours and a half. Teachers had the privilege of attending the classes free of charge, and were allowed free railway travelling. Needless to say, the institution of these classes was hailed with delight, and the work, which was new to most of the teachers, was entered on with an enthusiasm that was well maintained

In accordance with the provisions of the Manual and Technical Instruction Act, the Timaru Technical Association was formed, with the Education Board as controlling authority; and, though it was so late in the year that there was time for only one term of lessons, evening classes were established and successfully conducted by the association. We hope to find this association appreciated by the townspeople, and so loyally supported that at no distant date a fully equipped technical school may be established in our town.

## REPORT OF MANAGERS OF TECHNICAL CLASSES ASSOCIATION.

The Timaru Technical Classes Association was formed at a meeting held on the 18th June, 1901, when a provisional committee was set up. The committee set to work vigorously, secured the fitting-up of the Main School so as to enable evening classes to be carried on, and succeeded in obtaining subscriptions from no fewer than 173 citizens, and also from the Levels County Council,

Timaru Borough Council, the South Canterbury Jockey Club, and the South Canterbury Caledonian Society. Five persons became life members of the association. The business of the association was carried on by this provisional committee until the 7th August, 1901, when, at a general meeting of the members, seven managers were elected, according to the regulations under "The Manual and Technical Instruction Act, 1900." The South Canterbury Board of Education being entitled to a voice in the management of the association, nominated two members as its representatives. It was found best to set up Associated Classes, with the South Canterbury Education Board as controlling authority.

The following shows what classes were carried on during the session, and the number of students in each class: Arithmetic, 31 pupils; book-keeping, 76; cookery, 32; drawing, 24; dress-making, 82; English, 29; English literature, 69; French, 11; Latin, 8; mathematics, 15; mechanical drawing, 26; painting and modelling, 15; shorthand, 64: total, 482. Altogether 368

individual pupils were enrolled in the various classes.

It should be noted here that the liberal contributions of the citizens and of the local bodies, and the fees paid by the pupils, more than covered the expenditure of the association. Hence there is apparently a substantial credit balance. But the experience of the year has convinced the managers that if the work of the association is to be carried on with permanent success and with all-round benefit to the young people of the town it is absolutely necessary that a building suitable for technical classes be erected as soon as possible. This building must be one in which classes in such subjects as woodwork and plumbing may be carried on. Therefore the managers think that a vigorous and determined effort should be made by the citizens to raise funds to erect such a building.

Some of the classes, notably the dressmaking and the shorthand, proved rather unwieldy; but the experience gained will prove valuable when arrangements are being made for succeeding

The session lasted for twelve weeks, ending about the middle of October.

The balance-sheet is as follows: Receipts: Voluntary contributions, £87 7s. 6d.; pupils' fees, Ine balance-sneet is as follows: Receipts: Voluntary contributions, £87 7s. 6d.; pupils fees, £118 8s. 6d.; goods sold, £1 8s. 6d.; Government subsidy, £79 17s. 6d.; Government capitatation, £63 1s. 5d.; interest, 17s. 1d.: total, £351 0s. 6d. Expenditure: Teachers' salaries, £102 6s.; gas-fittings, £33 0s. 9d.; permanent apparatus, £13 19s. 2d.; groceries, &c., £2 6s. 3d.; stationery, £2 4s. 6d.; printing and advertising, £7 10s. 6d.; janitor, £6 14s.; gas, £2 15s. 6d.; stamps and telegrams, £1 3s. 3d.; fees returned, 9s.; hire of hall, 11s.; cheque-book, 5s.; secretary and superintendent, £17; auditor, 10s. 6d.: total expenditure, £190 15s. 5d. Balance in bank £160 5s. 1d.

There is due to the Timaru Gas Company an account for £11 12s., which may be paid when the Government has intimated how much it will grant the association on a claim for material J. A. VALENTINE, B.A., Secretary. amounting to just over £40.

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#### REPORT OF BOARD OF EDUCATION.

Technical Instruction. - With the view to the introduction of handwork into the schools, the Board, as soon as it was furnished with the means, organized classes for the training of the teachers in kindergarten work, and in plasticine and cardboard modelling. Afternoon classes, evening classes, Saturday classes, and summer classes were held in Dunedin, and Saturday classes in Oamaru, all of them being in every way most successful. Teachers are now awaiting the necessary modification of the syllabus to enable them to introduce these subjects as an integral part of the schoolwork. The question of cookery for the girls of Standards VI. and VII. also occupied the Board's attention, and arrangements are now completed for a regular course of

instructions in this subject.

The Technical Course of Instruction at the Normal School.—Besides the usual course of instruction given by the members of the staff, special lessons were given on kindergarten work and modelling in plasticine. Miss Landels gave a course of lessons on paper-folding and paper-cutting, in which the students were much interested. Mr. Walls, the instructor in modelling, spoke highly of the work done by the students in this subject. The students were given a series of practical lessons in paper-folding, which were afterwards repeated in the Normal School and in some of the associated schools. On the whole, they were satisfactory, and of real educational value and interest. Before kindergarten or manual work is introduced into the public schools, large or small, a definite course of experimental lessons on the subject should be given, with the view of determining the most suitable subjects for public-school classes, and of arranging a definite course of lessons, together with instructions with regard to the methods and principles to be adopted in teaching kindergarten and manual lessons.

#### REPORT OF THE PRINCIPAL OF THE SCHOOL OF ART AND DESIGN.

During the year the total number of students enrolled was 443, showing a decided increase on that of the previous year. This total included 112 students who attended the day classes, 47 pupil-teachers, 26 students from the Training College, 214 students who attended the evening classes, and 44 teachers and pupil-teachers who attended the Saturday classes.

Classes for elementary and advanced drawing and painting were held every day and evening, including Saturday forenoon. The work comprised outline drawing and shading from models, from casts of ornament, and from the figure; drawing and painting from groups of still life, from flowers, and from the life, both draped and nude; drawing plant-forms from nature, elementary design and modelling in clay; practical plane and solid geometry, perspective, building-construction, and machine construction and drawing.

Outline Drawing, and Light and Shade.—The elementary course consisted of drawing nations from practical models, from passes and from size of course of graving and states.

outline from geometrical models, from vases, and from simple casts of ornament; the advanced

section drawing in light and shade from groups of models, from casts of ornament, the figure from the antique, and from life. The work done by the students was highly satisfactory.

Painting Class.—The work in connection with this class consisted of studies in colour from still life, from groups of art objects, and from flowers from nature. During the first and fourth quarter excursions were made every week to the Botanical Gardens and to the Leith Valley, for

the purpose of studying landscape-painting from nature. The studies, on the whole, were very good. *Elementary Design*.—Classes for the study of plant-form and elementary design were held on Mondays and Fridays. Keen interest was taken by the students in the study of plant-form in relation to ornamental design. The principles of ornament were explained and illustrated by diagrams and sketches of geometrical ornament, of types of ornamental construction, of resolution The students were of natural into ornamental forms, and of elements of ornamental construction. required to make designs to fit given spaces, such as a square, a triangle, a circle, lunette, and to design simple borders, &c. A great deal of the work was original in conception, and worked out with considerable skill.

Modelling.—Classes for modelling were held twice a week. The elementary students worked from simple casts of ornament and details of the figure; while the more advanced ones worked from original designs in low and high relief, from the antique, and from life, both draped and nude. The work of these classes showed a decided improvement on previous years. The modelling from life, casts of which may be seen at the school, was especially good.

Drawing the Figure from Life.—The life classes were highly appreciated by the students, and their studies of heads and the whole figure during the session were of a very high order.

The course of instruction for students of the Training College who had passed the usual pupilteachers' examinations was as follows: Drawing diagrams on the blackboard, sketching from models and from common objects; drawing in light and shade from casts, and modelling in clay. The object of this course was the acquirement by the students of freedom and skill in drawing diagrams, or in modelling any simple object, so as to convey to a class a better idea of the object than would be possible from a mere verbal description. Mr. Wall supplemented this course by a series of lessons in modelling in plasticine. The course for students admitted by examination comprised freehand and model drawing, practical geometry, and perspective. At the close of the session 18 students obtained full certificates, and 6 passed in freehand and model drawing.

Teachers' and pupil-teachers' classes were held as follows: Monday and Wednesday, from 5.45 to 6.45 p.m., for freehand and model drawing; Tuesday and Thursday, geometrical drawing and perspective; and on Saturday, from 10 to 12, for the same subjects, including light and shade and modelling. At the pupil-teachers' annual examination 17 passed in freehand and model drawing, 14 passed in geometrical drawing, and 17 in perspective.

School of Mines.—Classes for students of the School of Mines were held as follows: Firstyear students, Monday and Wednesday, from 2 to 4, for model-drawing and practical geometry; second-year students, Tuesday and Thursday, from 8.30 to 9.30 a.m., for solid geometry, and from 7 to 8, evening, for machine-construction. The students worked hard during the session, and at the final examination 8 passed in model-drawing, 6 passed in geometrical drawing, 7 passed in solid geometry, and 6 passed in machine construction and drawing.

Evening classes were held every evening (except Saturday) from 7 to 9. Monday, Wednesday, and Friday evenings were set apart for art subjects. The work of the students attending these classes was similar to that of the day classes; and the same remarks apply to the evening classes as to the day classes. Tuesday and Thursday were devoted to science subjects, such as practical plane and solid geometry, building-construction, and machine construction and drawing. A good deal of very useful work was done by the students, who took a great interest in the work. During the first three quarters the attendance was very large, and, although the extra room was used, the accommodation was barely sufficient for the students to work with comfort.

South Kensington Science and Art Examinations.—One work was accepted for the Art Class Teachers' Certificate. The results of the annual examination, held last June, are not to hand. The annual exhibition of students' work was open for three days, and attracted a large number of

visitors.

REPORT OF THE SECRETARY OF THE DUNEDIN TECHNICAL CLASSES ASSOCIATION.

DAVID C. HUTTON, Art Master, Principal.

The total number of students enrolled in the various classes carried on at Dunedin and Port Chalmers during the year was 753, a decrease of 28 on last year's number. This decrease is entirely due to the falling-off during the second quarter, the number attending during the first quarter being the highest yet recorded in the history of the association. Although the staff still consists of 29 teachers, the number of separate classes has been increased from 40 to 44, and instruction given in twenty-five different subjects.

This year no new subjects were undertaken, but an additional class in wood-carving was opened

at Dunedin, and shorthand and typewriting were added to the list at Port Chalmers.

The association continued its former policy of remitting the fees of those students not in a position to pay, and thirteen students were granted total remission of fees. In this connection the Committee wish to again make known the fact that one member, in addition to his regular subscription, annually donates a special sum to partly cover the cost of the classes these students attend.

In former annual reports reference has frequently been made to the poor support accorded to the association by employers' associations, trades-unions, and other bodies which should be closely interested in and connected with its work. It is therefore gratifying to be able to report that the Plumbers' Association has resolved to require all apprentices of the trade to attend the technical classes on the subject, and that the Builders' Association has agreed to subsidise the work of this association by granting an annual subscription. It is to be hoped that these examples will be

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followed by other bodies. It is also pleasing to report that the City Council has shown its interest in and appreciation of the work of the classes by making a donation of £50 to the funds of the association.

During the year the Government paid to the association the sum of £2,000 to enable it to erect additional buildings in which to accommodate the proposed classes for electrical engineering, as well as to cope with the increased demand for room required by the chemical and physical laboratories, and cookery-room. On going into the question thoroughly your Committee found that the amount would not suffice for the work to be undertaken, and as the lease of the property expires in June, 1902, and with it the power to secure the whole on advantageous terms under a purchasing clause, it was decided to again approach the Government and ask permission to deflect the grant from its original purpose to that of purchasing the property. This application was granted, and your Committee is now in negotiation to raise the balance of £500 required to complete the purchase, and this, it is hoped, will shortly be effected. Considering that nearly five thousand pupils have passed through these classes since their inception, your Committee are of opinion that the importance of the work done merits generous and continued support at the hands of the citizens of Dunedin.

The results of the City and Guilds of London Institute examination are again of a very gratifying nature. In the ordinary grade of mechanical engineering 6 students passed in Part I., while in Part II. 1 student obtained a first-class pass, and 3 students gained a second-class, while 1 student obtained a first-class pass in the ordinary grade of carpentry and joinery. In the honours grade of principles of plumbing 4 students obtained a second-class pass.

In considering the work of and the attendance at the various classes the latter may conveniently be taken in groups. Of the continuation classes that in arithmetic was the largest, the attendance at one time during the first quarter being fifty. I purpose next year separating the senior and junior divisions, and having each taught at different times. This will allow for more attention to the backward members of the class. The junior English class was also well attended, and the average attendance extremely good. The senior English class comes next in size, but, considering the value of the work and the thoroughness of the teaching, it does not by any means get the support it moving. To the best stradent of this class Professor Gilray new grants free trition at To the best student of this class Professor Gilray now grants free tuition at the support it merits. the support it merits. To the best student of this class Professor Giray now grants free tuition at his University class. The mathematics class, taught in two separate divisions, contained students varying greatly both in ability and application, and although the behaviour of students in the classroom was in every respect satisfactory, yet many of them, especially those of the junior division, appeared to have great aversion to doing any work in the way of home preparation.

There is a slight improvement in the attendance of the Latin class, and, although the class is not large, the number of divisions renders it rather difficult to overtake the work in two hours per

week. In the French class, a class much smaller than the Latin class, the same difficulty was

met with until the teacher, voluntarily extending the time, took each division separately.

Reference to the commercial classes is always made with pleasure. They are the best-sup-

ported of our classes, and the results attained are uniformly good and favourably commented on by the examiners. Of all classes carried on by the association, that in book-keeping still enjoys the distinction of having the largest number of students. Those interested should inquire regarding the quality of the practical work done in this class. The number attending the shorthand classes at Dunedin was not quite so great as last year, but the attention and behaviour of the students is this year a matter for congratulation, and the examiner emphasizes the improved quality of the At Port Chalmers 20 students took the subject in the first quarter, and 16 in the second They were examined along with the Dunedin students, and, in the junior class at least, more than held their own—a sufficient guarantee of the work done. Commercial law is attended by students who it is a pleasure to teach, and the teacher of this class now intimates that he is prepared to undertake a separate class for the teaching of industrial law, as provided for in the To penmanship this year was added commercial correspondence, but the support accorded the class was not very encouraging. The style of writing taught in this class is again most strongly recommended by the examiners as being, in their opinion, the most suitable for commercial purposes.

Turning now to the classes known as "trade classes," I cannot but express regret at the meagre support accorded the majority of these. During the first quarter a satisfactorily attended class was carried on in tailor cutting and fitting, but during the second quarter, although tweed for practising was provided free of cost to the students, so little interest was taken in the class that it had to be abandoned. The attendance at the class for painters' and decorators' work was not much better, and it was only the enthusiasm of the teacher that kept the class from sharing the fate of the tailoring class. Compared with previous years, the number taking carpentry also shows a great falling-off, while the class for theory of plumbing, taught by the same teacher, practically became defunct. The practical plumbing class was regularly attended by 11 students, but the teacher could have comfortably taught as many more, and the additional cost of material used would have been trifling. In all the subjects of this group practical classes are carried on chiefly for the benefit of apprentices, who, after explanation and demonstration by the teacher, are given practice in the class of work with which they are not likely to be intrusted by their employers until they have given some indication of their ability to perform such work. Our practical classes have in this way supplied a want, but they are not to be regarded as classes for teaching trades, and thus dispensing with apprenticeship.

In addition to these practical classes, the association carries on separate classes for theory and principle in carpentry and plumbing. By means of these classes students working at their respective trades during the day are given an opportunity of acquiring a knowledge of the principles underlying their work, thus rendering them more intelligent and more efficient workmen—indeed, making them truly masters of their calling or profession. The results of the City and Guilds

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Examinations bear testimony to the good work done in our theory classes; but such classes are not recognised in the recent regulations issued by the Education Department, for these regulations prescribe that at least half the time of the class must be given to practical work. In fact, the regulations recommend one and a half hours' practical work at each lesson, and, as our school is open only two hours each evening, this leaves but half an hour for the study of the principles. Further, after a day's work of eight hours students are not inclined to devote another hour and a half to the same kind of work.

On the other hand, the changes required to be made in the cookery classes in order to bring them into agreement with the regulations will lead to even better work than formerly in these classes.

The number of students attending the class in wood-carving was too great for the teacher to supervise, and an extra class was therefore opened. Since the present teacher took charge the examiner has repeatedly expressed approval of the bold-relief style of carving taught; but, although the class is crowded, carpenters and cabinetmakers, for whom the work is specially suited, are poorly represented.

At the beginning of the session the number of students taking dressmaking was so great that the class had to be duplicated, but during the second quarter the attendance at this class was, as

usual, small.

Of the science classes, that in chemistry is the best supported. The students are drawn from all grades, and the majority are extremely earnest in their work. Professor Black's prize of free tuition at the University to the dux of this class leads to remarkably good work among the best students. The physics class still continues to be only fairly attended, and not to any extent by the class of students for whose benefit it was established. Here also the competition for the University prize (Professor Shand's) results in very careful work and a healthy rivalry among the leading students.

The botany class, which has just started for the spring session, is in a much better state than it has been for some years. In attendance at present there are 18 students, of whom nearly all are either kindergarten students or chemists' assistants.

Of other classes, the mechanical engineering and drawing classes at Port Chalmers are the principal; and to suit the requirements of those students who intend sitting for the City and Guilds

Examinations a special class will be carried on during the summer months.

In summarising the year's work, if allowance be made for the unusual distractions and consequent interruptions, the result may be regarded as extremely satisfactory. The students as a body have been earnest and diligent, and well behaved.

Angus Marshall, Secretary.

The balance-sheet is appended herewith, and shows a debit balance of £42 15s. 6d. on account of the financial operations over the period ending the 31st December, 1901, but since the balance-sheet was made up the financial position has been improved by receipt from Government of £93 6s., the subsidy on voluntary contributions.

Statement of Receipts and Expenditure for Period ended 31st December, 1901.

Receipts.		£	s.	đ.	İ	Expen	diture.	£.	s.	d.
Fees		504	2	6	Balance, 31st Januar	7, 1901		 3	5	1
Donations		93	6	0	Salaries			 686	8	5
Government grants—					Printing, advertising,	&c.		 34	3	1
For premises		2,000	0	0	Apparatus and fitting	s		 365	17	8
		178	6	10	Materials			 48	17	8
		54	12	0	Gas	• •		 25	5	1
Subsidy on donations		179	18	3	Insurance	• •		 13	14	11
		91	9	10	Repairs			 5	11	9
Education Board		75	0	0	Rents		• •	 96	7	6
City Council		50	0	0	Fixed deposit, Bank of	of New	Zealand	 2,000	0	0
Interest		10	0	3						
Bank overdraft, 31st December,	1901	42	15	6	I					
•										
		£3,279	11	2				£3,279	11	2

Examined and found correct.—C. Grater, Auditor.

#### SOUTHLAND.

# REPORT OF THE BOARD OF EDUCATION.

Technical Education.—In last year's report reference was made to the probability of the Board taking over the work for several years carried on by the Technical Classes Association of Invercargill. The Board has now to report that the overtures then made by that association were agreed to, and the sole control of technical education throughout the Southland District was assumed by the Board. With the view to a proper organization of technical and continuation classes under the Manual and Technical Instruction Act, the Board at its August meeting appointed Mr. W. A. McCaw to the position of Director of Technical Instruction, and from that officer's annual report full particulars respecting the inauguration and continuance of technical instruction under the supervision of the Board will be obtained.

In the month of June last, and at the invitation of the Board, the then recently appointed Technical Inspectors for the colony, Messrs. Isaac and Browne, paid a visit to the district, and while here delivered a series of demonstration lectures illustrative of the method of conducting school classes. An audience of over one hundred teachers met the Inspectors, and it is quite safe to state that the opportune visit of those gentlemen did much to foster and encourage the enthusiasm

of our teachers in the matter of technical education.

Financially, the Board has reason to congratulate itself on the satisfactory result of its first year's control of technical education in Southland. The total sum received up till the 31st December was £399 11s. 4d., and the expenditure for the same period was £418 17s. The chief items of receipts were as follows: Government grants for (1) capitation £54 5s. 3d., (2) apparatus £114 18s. 7d., (3) subsidy on voluntary contributions £7 12s. 6d.; from students' fees, £213 1s. 6d.; amount handed over to the Board by the Technical Classes Association, £9 13s. 6d. The aggregate of expenditure was made up as follows: Instructors' salaries, £253 15s.; material, £11 16s. 1d.; apparatus, £127 19s. 8d.; rent, £1; and incidentals, £24 6s. 3d. The foregoing figures do not represent the aggregate financial results of the year's operations, as several sums due by the Government in respect of capitation earned by the classes were not received before the close of the year, while considerable liabilities also existed at that date. It is perfectly safe to assume, however, that the general financial results of the year's work will be a substantial sum to the credit of the Technical Instruction Account wherewith to commence and carry on next year's operations.

#### REPORT OF INSPECTORS OF SCHOOLS.

It remains to say something of handwork. The subject has for many years occupied an important place in our infant departments in the form of kindergarten exercises. It is now taking definite shape in the upper classes also. During the past year there were taken up, in addition to the usual kindergarten, paper cutting and mounting, modelling in plasticine and (in one school) brushwork. The visit of the Department's technical Inspectors in June, and the special grant, with the consequent establishment of classes for the instruction of teachers, have tended to win for handwork a still more prominent position in our primary-school course. We estimate that the absolute limit to the usefulness of this new subject will be attained by two hours' instruction per week. That would give something like five hundred lessons of an hour's duration to an average school course.

Approximate Cost of Paper .- Preparation, not given; printing (1,650 copies), £15 4s.

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