1898.

NEW ZEALAND.

# EDUCATION:

## MANUAL TRAINING AND TECHNICAL INSTRUCTION.

[In continuation of E.–1c., Sess. II., 1897.]

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

### I. EXTRACT FROM TWENTY-FIRST ANNUAL REPORT OF THE MINISTER OF EDUCATION.

#### Manual Training and Technical Instruction.

The annual reports of the several Education Boards afford no reason to believe that any great activity is being manifested in the development of that kind of elementary manual training which, under the operation of the Act of 1895, is now recognised as being part of the proper educative work of the primary schools, and which, while including kindergarten occupations and "sloyd," is capable of wide development in cardboard-work, and in the construction of models in wood and metal as illustrations of many subjects of scientific instruction. Development in this direction does not necessarily come under the notice of the department, as it lies within the province of the Education Boards. With respect to another form of manual instruction, a form in which it constitutes, through the handling of tools and materials, a more direct preparation for manual trades, the Act of 1895 contemplates a measure of co-operation between the department and the Boards, since any serious treatment of the subject from this point of view seems to require a workshop and some expenditure on tools, and to have its proper place outside of the time properly devoted to such mental development and equipment as is generally comprehended under the word "schooling." It has been deemed a great gain to have secured in our time this "schooling" for the children of all classes, and it ought not to be proposed now to encroach upon its hours in the interests of that kind of serious preparation for a trade or a business which naturally begins when school-days are over. For manual instruction out of school-hours the Boards receive subsidy at the same rate as for any classes they may institute

outside of the schools for technical training. During 1897 the Auckland Education Board received £10 15s. 5d. for manual classes at Devonport, and £5 5s. for a similar class at Remuera. The Wellington Board received similar aid for three classes, as follows:—Paraparaumu, £4 19s. 6d.; Cross Creek, £2 0s. 6d.; Mauriceville West, £14 14s. 4d. The Grey Education Board, for a class in the Greymouth District High School, received £11 14s. 7d., beside a grant of £25 for equipment; the Westland Education Board, for a class at the Kumara School, £5 16s. 10d. as subsidy, and £70 for equipment. The Otago Education Board received a subsidy of £12 16s. 4d. for Balclutha District High School, and £9 16s. 11d. for a similar school at Tokomairiro. With respect to classes for technical instruction as distinguished from manual instruction, the Education Board of Wanganui received £52 1s. 4d. as subsidy on classes at Wanganui, and £13 17s. 11d. for classes at Palmerston North, and a special grant of £200 in aid of its Technical School at Wanganui. The Wellington Board received £396 17s. 1d. as capitation on classes at its Technical School, and a special grant of £100 in aid of the same institution. The Otago Education Board received £58 10s. as capitation for classes attending its School of Art. The North Canterbury Board has classes in Christchurch and Leeston, partly to prepare teachers for imparting manual instruction and partly for the manual instruction of the older school-boys. This Board received a capitation grant of £41 7s. 6d. for its Christchurch work, and a grant of £172 10s. for workshop installation; for the Leeston class it received £1 6s. 3d. as capitation, and £25 as a grant-in-aid. The total payments to Education Boards for capitation amount to £641 19s 6d., and the special grants amount to £592 10s.

In allowing capitation grants to technical classes it has been deemed better to err rather on the side of a too liberal interpretation of terms than on that of undue strictness, and—after the example of the Science and Art Department in London—to recognise such subjects as shorthand and book-keeping, and even classes that might fairly be considered as answering the purposes of a continuation school; but classes for primary school work have not been so recognised, nor classes for the instruction of pupil-teachers.

Special grants have been made to Technical Classes Associations as follows:—Auckland, £100; Gisborne, £30; Dunedin, £450; and Invercargill, £50; and a grant of £80 to the Christchurch School of Domestic Instruction. The capitation grants to these and other institutions are as follows:—Auckland Technical Classes Association, £40 3s. 4d.; Ashburton Technical Classes Association, £9 14s. 7d.; Balclutha Technical Classes Association, £40 17s. 10d.; Canterbury College School of Art, £162 4s. 10d.; Christchurch School of Domestic Instruction, £99 2s. 1d.; Christchurch Young Men's Christian Association, £17 2s. 11d.; Christchurch Boys' Gordon Hall, 14s. 7d.; Dunedin Technical Classes Association, £82 2s. 8d.; Gisborne Technical Classes Association, £42 5s. 4d.; Invercargill Technical Classes Association, £33 14s. 4d.; Kaitangata Technical Classes Association, £8 16s. 9d.; Masterton Technical Classes Association, £9 12s. 1d.; Napier Junior Club, £3 4s. 7d.; Tuanaroa Technical Classes Association, £10 16s. 6d.; Westport Technical Classes Association, £11 7s. 3d.; Waiwera Technical Classes Association, £8 16s. 4d.; Warepa Technical Classes Association, £7 18s. 5d.

To the teachers of what may be called private adventure classes capitation payments have been made as follows:—Messrs. Bickerton Brothers, Christchurch, £15 3s. 7d.; Miss A. M. Carr, Christchurch, £109 10s.; Mr. C. H. Gilby, Christchurch, £34 16s. 6d.; Misses Hardie and Manning, Napier, £12 7s. 1d.; Mr. W. I. Robinson, Auckland, £42 9s. 9d.; Mr. J. M. Telford, Christchurch, £2 11s. 3d. The total of capitation grants to individual teachers is £805 12s. 7d., and of capitation and special grants to associations, £710. The other items of expenditure for 1897 on account of technical instruction are as follows:—Expenses of Science and Art Department examinations, £62 11s. 7d.; expenses of City and Guilds of London Institute examinations, £33 10s. 9d.; part of cost of railway travelling of students and teachers, £68 9s. 1d; preparation of drawings of woodwork exercises, £15 9s. 3d.; publications purchased, 8s. 4d.; freight on loan collection from Science and Art Department, £1 5s. 7d.

The following table shows the number of papers worked at the English examinations held in the colony, and the number of successes :—

LONDON TECHNICAL AND ART EXAMINATIONS, 1897.

| Subjects of Examination. | Auckland. | | Wanganui. | | Wellington. | | Wellington* Sub-centres. | | Nelson. | | Christchurch. | | Dunedin. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Candidates. | Passes. | Candidates. | Passes. | Candidates. | Passes. | Candidates. | Passes. | Candidates. | Passes. | Candidates. | Passes. | Candidates. | Passes. |
| *Science and Art Department.* | | | | | | | | | | | | | | |
| Art— | | | | | | | | | | | | | | |
| Drawing in light and shade (elementary) | 3 | 2 | 8 | 7 | 42 | 30 | 1 | .. | 5 | 5 | 12 | 12 | 32 | 24 |
| Drawing in light and shade (advanced) | 2 | 1 | 7 | 7 | 23 | 23 | .. | .. | .. | .. | 5 | 5 | 17 | 17 |
| Perspective (elementary) | 1 | 1 | 4 | 3 | 16 | 14 | 4 | 3 | 5 | 2 | 11 | 8 | 2 | 1 |
| " (advanced) | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 |
| Model drawing (elementary) | 2 | 2 | 13 | 5 | 62 | 41 | 8 | 5 | 5 | 3 | 39 | 26 | 56 | 41 |
| " (advanced) | 2 | 1 | 4 | 3 | 16 | 16 | .. | .. | .. | .. | 4 | 4 | 12 | 12 |
| Freehand drawing of ornament (elementary) | 10 | 8 | 42 | 35 | 66 | 46 | 26 | 16 | 5 | 5 | 42 | 34 | 78 | 51 |
| Freehand drawing of ornament (advanced) | 4 | 2 | 12 | 9 | 11 | 11 | .. | .. | .. | .. | 6 | 6 | 19 | 19 |
| Geometrical drawing (art) | 2 | 2 | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | 22 | 20 |
| Design (elementary) | .. | .. | .. | .. | 3 | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| " (advanced) | .. | .. | .. | .. | 2 | 2 | .. | .. | .. | .. | .. | .. | .. | .. |
| Painting from still life | .. | .. | 3 | .. | 6 | 3 | .. | .. | .. | .. | 9 | 6 | 1 | 1 |
| Drawing from the life | .. | .. | .. | .. | 4 | 1 | .. | .. | .. | .. | 3 | 3 | .. | .. |
| " " antique | .. | .. | .. | .. | 10 | 5 | .. | .. | .. | .. | 4 | 3 | 2 | 2 |
| Painting ornament in monochrome | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 |
| Principles of ornament (elementary) | .. | .. | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | 1 | 1 |
| Students' works | .. | .. | 17 | 7 | 28 | 11 | .. | .. | .. | .. | .. | .. | 7 | 1 |
| Science— | | | | | | | | | | | | | | |
| Practical plane and solid geometry | .. | .. | .. | .. | 10 | 2 | 7 | 1 | 5 | 2 | 7 | 2 | 16 | 9 |
| Mathematics, stages 1, 2, 3 | 3 | 3 | .. | .. | 11 | 6 | .. | .. | .. | .. | .. | .. | 1 | .. |
| Magnetism and electricity | .. | .. | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Machine construction and drawing | 15 | 9 | .. | .. | 8 | 7 | .. | .. | .. | .. | .. | .. | 7 | 6 |
| Building construction | 7 | 3 | .. | .. | 11 | 9 | .. | .. | .. | .. | .. | .. | 11 | 8 |
| Practical inorganic chemistry | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 |
| Inorganic chemistry (theory) | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. |
| Applied mechanics | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3 | 3 |
| *City and Guilds of London Institute.* | | | | | | | | | | | | | | |
| Painters' and decorators' work | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Telegraphy | .. | .. | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Mechanical engineering | .. | .. | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | 1 | 1 |
| Plumbing (preliminary) | 2 | 2 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| " (written) | 2 | 2 | .. | .. | 12 | 12 | .. | .. | .. | .. | .. | .. | 5 | 5 |
| " (practical) | 3 | 3 | .. | .. | 7 | 7 | .. | .. | .. | .. | .. | .. | 4 | 4 |
| Totals | 59 | 42 | 112 | 78 | 352 | 251 | 46 | 25 | 25 | 17 | 142 | 109 | 301 | 229 |

Total of papers, 1,037; total of passes, 751.

* Pahiatua, Masterton, Featherston, Levin, and Westport.

In the reports of the Otago University (E.–7), Canterbury College (E.–8), and Canterbury Agricultural College (E.–9), will be found statements of the instruction provided by those institutions in medicine and surgery, and in mining (at Dunedin), in engineering (at Christchurch), and in agricultural science (Lincoln). The annual report (C.–3) on the Goldfields of New Zealand contains information respecting the mining schools under the direction of the Department of Mines, and the annual report of the Department of Agriculture gives particulars of technical instruction imparted in connection with agricultural experimental stations, fruit farms, and dairy schools.

## II. REPORTS OF SCHOOLS AND CLASSES.

### AUCKLAND TECHNICAL SCHOOL ASSOCIATION.

#### THIRD ANNUAL REPORT.

YOUR Council beg to submit herewith their report of the proceedings of the school for the year ended the 30th November, 1897. The school opened for the first term on the 15th February, and concluded its fourth term on the 27th November. The attendances for all classes for each term were as follows: First term, 86; second term, 107; third term, 78; fourth term, 110: the total

entrances being 381 for the year; average per term, 95¼. It is necessary to explain that, notwithstanding the smaller amounts received from students' fees, the revenue derived from that source has more nearly approached the cost of instructors' salaries than it did in either of the previous years, and though an amalgamation of two classes (freehand and geometrical drawing) was made at the beginning of the year, and cookery and dressmaking classes only opened when sufficient students enrolled, the progress of the classes has been in no way impaired. The *personnel* of the instructors' staff remains the same as last year, with two exceptions. In April Mr. J. A. Paterson, practical engineer and draughtsman, was appointed instructor in the mechanical drawing and machine-construction department, and continues in that capacity. Mr. J. H. Edwards, who had held the position of instructor in wood-carving since the establishment of the school in 1895, having entered into business in the Waikato, was obliged to resign in September. His successor, Mr. W. Batts, jun., an expert tradesman, who had on several occasions acted temporarily, was engaged to fill the position. Considerable improvement is noticeable in the work of the students, and the bearing of the school instruction upon practical trade work is becoming more manifest to both employers of skilled labour and the workmen themselves. The carpentry, stair-work, and plumbing departments may be specially instanced as attracting a large number of workmen desirous of improving their theoretical and practical knowledge of certain branches of their work. Some samples of roof-work, sash-frames, and stair-work made in the wood department, and of lead-work in the plumbing department, are well worthy of inspection. Other important trade subjects—graining and marbling—are also receiving special attention, and some first-class results have been obtained. The results of the 1896 examinations in connection with the South Kensington Science and Art Department came to hand in March, 1897, but, as was to be expected from the fact that the school had been only twelve months in existence, and the students new to examination work, not much success was attained.

The first examination under the auspices of the City and Guilds of London Institute was held in May last. The following is a summary of the candidates and their successes: Plumbers' work, preliminary examination—Harry Jane and Benjamin Crawford each obtained a pass. Plumbers' work, ordinary grade—Benjamin Crawford, first-class pass; Harry Jane, second-class pass; one failed. Plumbers' work, practical examination—Harry Jane, Benjamin Crawford, and Charles Osborne obtained passes. Painters' and decorators' work, ordinary grade—Seven students entered for this section, but, as the range of subjects differed from that comprised in the course of instruction in the graining and marbling class, only one, Charles Fricker, made an attempt to answer the questions set. He secured a second-class pass.

The results of the South Kensington Science and Art Examinations held at the Technical School in July of last year are as follows:—

*Science Subjects.*—Machine construction and drawing: Andreas Schmidt, elementary, pass (certificate); Jos. F. Doull, elementary, fair. Building construction: George Arnold, elementary, fair; Lewis Jackson, elementary, fair; George W. Allsop, pass (certificate); Frederick W. Herbert, pass (certificate); Archd. R. Carpenter, pass (certificate); Ernest H. Rhodes, fair. Mathematics, stage 1: Geo. S. Langsford, pass (certificate); Donald R. J. Campbell, pass (certificate); Ebenezer Wilson, pass (certificate).

*Art Subjects.*—(The degree of success obtained is shown by—(1), meaning first-class; and (2), meaning second-class.) Drawing in light and shade (advanced stage): Jas. W. Dickson (2). Model drawing: Henry E. Stanton (2). Freehand drawing: Ruth E. Lapham (1), James W. Dickson (2). Geometrical drawing (art): Joseph W. Finlason, pass; James W. Dickson, pass. Drawing in light and shade (elementary stage): James W. Dickson (2), Albert E. F. Thode (2). Model drawing: Albert E. F. Thode (1), Henry E. Stanton (1). Freehand drawing: Rhoda M. Collins (2), Ruth C. Lapham (1), Dorothy M. Lapham (1), Winifred M. Cargo (2), James W. Dickson (2), Henry E. Stanton (2), Joseph A. Finlason (1), Albert E. F. Thode (1). Perspective: Henry E. Stanton (2).

Taking into consideration the fact that this is only the second examination held in connection with the South Kensington Institution, and that the examinations are held at a very inconvenient period of the year's work, it must be considered very satisfactory indeed that there should be seven certificates won, seven first-class passes, and ten seconds secured, and four other students entitled to rank "fair." In this connection it may be well to say that the need for examinations of a different order—more adapted to colonial requirements—is much felt. Probably when some general scheme of technical education becomes an accomplished fact this object may be attained. The institution of a colonial examination would make examinations much more attractive to our young artisans, and help to draw out their latent knowledge. A number of plaster casts sent out by the South Kensington Institution for use in the last examinations have been secured to the school through representations made by our secretary to the Education Department at Wellington. These will prove a most acceptable addition to our stock. The withdrawal of subsidy upon subscriptions and substitution of a capitation payment upon average attendance of students, under the Technical Education Act of 1895, has reduced the Government aid from £238 odd in 1896 to £159 5s. 2d. in 1897, in the latter sum being included a special grant of £100. The utter insufficiency of the amount that can be obtained under the rate of capitation provided in that Act prompted your Council to take the initiative in a movement to secure further Government assistance, and after the views of all the other Technical School Associations in the colony had been ascertained a memorial was prepared by this Council for presentation to the Minister of Education, embodying the principal points of agreement, and submitted to the southern institutions for their approval and signature. Several signed the memorial as drafted, others made some modifications; Wanganui and Dunedin presented memorials of their own.

A special meeting of several of the Auckland members of Parliament was held in this building on the 18th September last, and the position of the school and its needs were explained to the members by Sir Maurice O'Rorke, president of the association, and promises were made by them to give hearty

support to any measure providing the assistance desired. It may be inferred that the combined action of the several institutions impressed the Government with the necessity there was for the introduction of a more liberal and comprehensive measure than that of 1895, and the Premier's new Technical Education Bill certainly was a distinct improvement upon the original Act. Probably the only cause for dissatisfaction was the small increase in the present rate of capitation (1s. 3d.), the proposed rate being 1s. 9d. The capitation earned this year at the 1s. 3d. rate was £58 0s. 2d., and at 1s. 9d. it would be £81 4s. 2d., or an increase of £23 4s. only. The Council trusts that the measure to be introduced this year will raise the capitation-rate to 3s. 9d., which would give the school £174 0s. 6d. instead of £58 0s. 2d., an increase by no means excessive. The Bill that was submitted to Parliament last session was, as stated above, a great advance on all previous measures relating to technical education in this colony, and it is deeply to be deplored that the benefits it proposed to confer on the young working-classes of New Zealand failed to be realised. The measure was announced as one of the leading Bills of the session in the Governor's Speech in opening Parliament on the 23rd September, and was more fully alluded to in the Financial Statement, which announced that in order that the industrial classes might be specially benefited, and fitted to undertake scientific, mechanical, and mining pursuits, it was of national importance that technical education should be placed upon a more satisfactory footing, and that the drawback to the present system was the lack of funds and of suitable buildings. The measure submitted to Parliament proposed to bring technical education into connection with Boards of Education, to increase capitation allowance, to establish continuation schools as an auxiliary to the technical-school system, and to contribute pound for pound to meet subscriptions, and 10s. for every pound bequeathed by persons interested in the cause, whilst a sum of £25,000 was to be provided for buildings and furnishing technical schools with apparatus and requisite appliances. But all these advantages, which seemed to be universally approved, and which were so urgently required, have been wrecked in the conflict of politics, and this association is in no better, but rather in a worse, position to carry on technical education in the Auckland District this year than it was last year. In ordinary affairs the managers of a public institution might be inclined to despair and proceed to close the school, but your Council think that, notwithstanding that the Technical Education Bill failed to become law last session, parliamentary relief is near at hand, and that in the early days of next session a Bill will be passed making suitable and permanent provision for a thorough system of technical education throughout the colony. The Council consider that the circumstances of the association are such as to compel it to revert, for a time, more largely than of late to the system of public subscription for assisting in keeping up the Auckland Technical School, and they believe that the public, becoming aware of the very limited means at the disposal of the association, will respond to an appeal for funds to enable it to tide over the difficulty that has arisen from Parliament having failed to give any additional aid to technical education in its last session. The proposal of the Government to contribute from the public funds an equal amount to sums raised by subscriptions will be an incentive to those who take an interest in technical education to subscribe as liberally as they can in order to get the benefit of those subsidies, and to keep this important branch of education alive, until it shall be taken over by the Board of Education as part and parcel of the general educational system of the district.

In order to afford some idea of the necessities of the association, and the diminished amounts received under the Government subsidy-upon-subscription system, and the capitation-upon-an-average-attendance system, afterwards substituted, the following statement has been prepared: 1895—Public subscriptions, £179; Government subsidy upon subscription, £179; Government special grant, £100: total, £458. 1896—Government capitation upon average attendance, £78 16s. 11d.; Government special grant, £100: total, £178 16s. 11d. Public subscriptions, £14 18s. 6d. 1897—Government capitation, £58 0s. 2d.; Government special grant, £100: total, £158 0s. 2d. Public subscriptions, £20.

The Council is indebted to Mr. Edward Withy, of Parnell, for a handsome donation of a model steam-engine and saw-mill plant mounted on a cabinet and covered with glass case; also for a paper on the "Stability of Floating Bodies," accompanied by wooden models for illustrating same. The former will be found very useful and interesting to students in the mechanical class, and the latter to marine engineers, should a class be formed for dealing with marine architecture.

For the Council,
G. Maurice O'Rorke, President.

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Statement of Receipts and Expenditure for the Year 1897.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Balance brought forward | 20 | 15 | 6 | Office expenses | 60 | 0 | 0 |
| Cash sales | 25 | 1 | 7 | Instructors' salaries | 195 | 5 | 0 |
| Fixed deposit withdrawn | 200 | 0 | 0 | General expenses | 67 | 0 | 11 |
| Interest on same | 8 | 0 | 0 | Advertising, printing, &c. | 22 | 18 | 3 |
| Subscriptions | 20 | 0 | 0 | Stock and plant | 41 | 10 | 5 |
| Fees | 191 | 10 | 0 | Rents, rates, taxes | 92 | 2 | 6 |
| Special grant | 100 | 0 | 0 | Cash at bank and in hand | 155 | 2 | 2 |
| Capitation | 59 | 15 | 2 | | | | |
| Treasurer Taranaki Fund | 5 | 0 | 0 | | | | |
| Discounts | 3 | 17 | 0 | | | | |
| | £633 | 19 | 3 | | £633 | 19 | 3 |

## Elam School of Art, Auckland.—Art Master's Report.

Sir,— Elam School of Art, Auckland, February, 1898.

The Elam School of Art differs from other art and technical schools in New Zealand inasmuch as it was founded and is maintained entirely by a bequest from the late Dr. J. E. Elam (whose name it bears), the trust being administered by three trustees resident in Auckland. Under the will of the founder all tuition is absolutely free, but students are to be chosen preferably from those whose circumstances do not admit of their paying for tuition. Four morning and four afternoon classes are held each week, and the number of students entered for each class is about twenty-two or twenty-three, with an average attendance of about eighteen per class. The number of individual students attending the school during the past year was seventy-one. Since the foundation of the school in 1890, 221 students (among whom were a large number of teachers and pupil-teachers) have passed through the school, the usual time spent in the school varying from one to three years. In every case tuition has been absolutely free. On Saturdays the school is open all day, for the sake of the teachers and pupil-teachers in the public schools and others engaged during the rest of the week, who can only attend on Saturdays.

The work taught in the school includes: Freehand and model drawing, shading from models and casts, geometrical and perspective drawing, painting in monochrome, painting from still-life in colour, painting from life, while during the summer the advanced students are taken out to sketch from nature.

The trustees are unable for the present, on account of the expense, to have the rooms occupied by the school fitted up for night-work, or to maintain an evening school, which is to be regretted, as such classes are much wanted in Auckland.

The school has a large and useful set of casts and models, and the rooms, in spite of their not having been built for the purpose of an art school, are commodious and by no means ill-suited to the purpose. The students generally have shown considerable industry and ability, and appear to desire by their work to show their appreciation of what the founder of the school has done for them.

I am, &c.,

E. W. Payton,

The Hon. the Minister of Education, Wellington. Art Master.

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## Mr. W. I. Robinson's Classes, Auckland and Suburbs.—Instructor's Report.

Sir,— Auckland, February, 1898.

I have the honour to submit the following report of my work in connection with these classes for 1897, which is the thirteenth year the classes have been in operation:—

The principal class meets in the Wellesley Street Public School. There are four terms in the year, each of thirteen weeks, with the exception of a week at the beginning and end of the year. The class meets twice a week, from 7 to 9.30 p.m. The subjects of instruction include all branches of geometry, mechanical drawing, machine and building construction, applied mechanics, steam and the steam-engine, and mechanical engineering, on the lines laid down by the South Kensington Science and Art Department and the City and Guilds of London Institute for the Advancement of Technical Education. The courses also prepare engineers for the examinations of the New Zealand Board of Trade. The class is well equipped with all necessary models, diagrams, and appliances required in the above branches of technical instruction. Under the head of "Mechanical drawing and geometry" are included the latest courses in graphic statics, carriage-drafting, handrail and stairs, and a course in metal-plate work for plumbers and tin-plate workers.

The number of pupils attending during the four terms were respectively twenty-four, thirty, twenty-seven, and thirty, which represents a slight increase on the attendance of the preceding year. These pupils are engineers and apprentices employed at the railway-works and the machine-shops of the city. There are also carpenters, carriage-builders, and river-engineers preparing for the examinations of the New Zealand Board of Trade. Thirteen pupils were presented in 1896 in the Science and Art Department's examination in machine construction and drawing, and the results returned last year were very satisfactory. Seven obtained pass certificates, and one "fair," which results were over the English average for that year in that subject. This was the first examination of the London department held in Auckland.

Under the New Zealand Government Examination of Engineers, the following pupils during the year obtained certificates of proficiency as third-class marine engineers: Alexander Currie, J. Carson, H. M. Williams, T. B. Whyte, and D. Robertson. Locomotive and traction engineer certificates were also awarded to J. Moyle, E. M. Kirchoff, and D. K. Talbot.

To meet the convenience of pupils who cannot attend the central class at Wellesley Street School, branch classes have been held at Onehunga, Ponsonby, and Remuera public schools. These classes meet one evening in the week; they have four terms of thirteen weeks each, with the exception of one or two evenings in the first term during the Christmas holidays. At the Onehunga class the number of pupils attending in the four terms of the year was respectively ten, nine, thirteen, and twelve. The subjects of instruction were mechanical drawing, machine construction, applied mechanics, and marine engineering. At the Ponsonby School the number of pupils attending during the four terms was respectively ten, twelve, twelve, and twelve. Subjects of instruction: Mechanical drawing and machine construction, carriage-drafting and marine engineering. At Remuera School the number of pupils attending during the four terms was respectively five, six, six, and four. Subjects of instruction: Machine construction and mechanical drawing. All these branch classes are provided with suitable models, reference drawings, and examples required in the various branches of instruction.

Two drawing classes have been held on Saturdays at the Wellesley Street School, one in the morning, another in the afternoon. These classes were laid out specially for teachers and pupil-teachers. The branches of instruction were—model drawing, plane and solid geometry, and perspective drawing, as required for the schools, the pupil-teachers, and the D and E examinations. The number attending, however, was small, so the class was thrown open to any pupils of the other classes who were preparing for examinations and were glad to make use of the opportunity. The number of pupils attending the four terms of the Saturday class was as follows: Morning, eight, twelve, six, none; afternoon, seventeen, sixteen, fifteen, sixteen.

The annual exhibition of technical drawings was held last April in the large room of the Wellesley Street School. It consisted of 120 sheets of finished drawings done in the ordinary course of class instruction at the Wellesley Street technical class and the branch classes. The drawings exhibited covered most branches of mechanical construction, and included marine engines and boilers, roof-work and building construction, hydraulic plant, and a large collection of modern machine-tools and shop appliances.

The work of the year, as a whole, compares very favourably with the work of previous sessions. It is now more generally recognised that while an apprentice is in the shop during the day studies bearing on his occupation should receive his attention during some evenings of the week, and this has led to a greater interest in applied mechanics and drawing of various kinds.

By the provisions of the Shipping and Seamen's Act Amendment Act of 1896 every engineering apprentice is eligible for a certificate of proficiency as a third-class marine engineer. It is to qualify for this and other examinations of a similar kind that the subject, "Steam and the Steam-engine" is now so much taken up. A number of the more advanced pupils are taking up mechanical engineering on the lines laid down by the City and Guilds of London Institute, with a view to sit at the next examination.

I have, &c.,

WALTER I. ROBINSON,
Technical Instructor.

The Hon. the Minister of Education.

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## CARPENTRY CLASS, REMUERA PUBLIC SCHOOL.

### INSTRUCTOR'S REPORT.

THE boys attending the carpentry class at the Remuera School have worked with fair diligence. They have been taught to handle tools, making their own benches and saw-stools. Then they have worked at mortising, framing, scarfing, and dovetailing. One produced a very creditable chest of drawers, and others have turned out different kinds of boxes.

GEORGE HERON.

STATEMENT of RECEIPTS and EXPENDITURE for the Year ending 31st December, 1897.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| To Fees | 2 | 2 | 0 | By Timber | 2 | 6 | 9 |
| Capitation grants | 5 | 5 | 0 | Instructor | 6 | 0 | 0 |
| School Committee | 0 | 19 | 9 | | | | |
| | £8 | 6 | 9 | | £8 | 6 | 9 |

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## CARPENTRY CLASS AT DEVONPORT PUBLIC SCHOOL.

*List of Articles made.*—Five medicine-chests, eight newspaper-pockets, four coal-scuttles, ten knife-trays, ten bookshelves (assorted), three salt-boxes, seven footstools, seven fan-brackets, two corner brackets, ten wall-brackets (assorted), four three-tier brackets, six soap-boxes, three brush-boxes, two forms, six pairs steps, three easels, six Oxford frames.

RECEIPTS and EXPENDITURE for Year 1897.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| To Fees | 5 | 17 | 0 | By Timber, nails, &c. | 3 | 15 | 11 |
| Donation | 0 | 10 | 0 | Tools | 0 | 12 | 3 |
| Government subsidy | 8 | 10 | 4 | Instructor | 9 | 0 | 0 |
| | | | | Balance | 1 | 9 | 2 |
| | £14 | 17 | 4 | | £14 | 17 | 4 |

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## WANGANUI TECHNICAL SCHOOL.

### DIRECTOR'S REPORT.

SIR,— Technical School, 31st March, 1898.

I have the honour to submit the following report of the work at this school, and at the branch Saturday classes for teachers at Palmerston North, for 1897:—

*Attendance.*—The number of students who attended the different classes during the three terms respectively was as follows: Morning class for drawing and painting, six, four, five; evening class, twenty-eight, thirty-five, thirty-seven (of these numbers there were four, three, four for machine construction, and three, five, seven for building construction). Saturday art class, for teachers of primary schools under the Board, twenty-seven, twenty-five, twenty-six. Girls' College — Drawing, fifty-seven, fifty-three, fifty-eight; painting, nine, six, nine; total, 127, 123, 132.

*Work.*—It is unnecessary to refer to the work of the different classes held in the school, as this has been similar to that of former years. The results, however, as judged by the South Kensington examination results, are more satisfactory than formerly. In 1896 there were ninety candidates, with twenty-three failures; in 1897 there were eighty-four candidates, with sixteen failures.

*South Kensington Examination Results.* — Advanced Time Examinations: Candidates, 23; failures, 4. Freehand from the cast—First class, 6; second class, 3; failed, 3. Shading from models—First class, 3; failed, 1. Light and shade from the cast—First class, 3; second class, 4.

Elementary Time Examinations: Candidates, 61; failures, 12. Freehand from the flat—First class, 15; second class, 20; failed, 7. Model-drawing—Second class, 5; failed, 3. Perspective—First class, 3; failed, 1. Light and shade from the cast—First class, 4; second class, 3; failed, 1. Painting in monochrome—Second class, 1. Geometrical drawing, 1 candidate passed.

Of the school works sent in March, 1897, to London for certificates the following were accepted: For the art master's certificate—Sheet of foliage in outline from nature, Herbert I. Babbage, Gertrude E. Brown, Florence A. Liffiton; outline of figure from the antique—Leonard J. Watkin. For the art class teacher's certificate—Sheet of geometrical problems, Herbert I. Babbage, Gertrude E. Brown; drawing from the cast, shaded in chalk—Herbert I. Babbage.

*Girls' College—Drawing and Painting Classes.*—These classes were continued as in former years. At the end of the year the Board added a room, specially designed for the satisfactory teaching of more advanced work, and provided casts, easels, and the necessary furniture for light and shade, and painting. I am sorry that the arrangements for this work during the past term have not been what I had hoped. This may to some extent be rectified during the remaining two terms of the year, when a more detailed statement regarding this matter can be made in the next annual report.

*Exhibition of Works.*—In addition to the usual annual exhibition of our own students' drawings and paintings, held in the school at the end of the year—which was open for a week, and inspected by a large number of visitors—a loan collection of forty-five works, illustrating the different stages of instruction in schools of art in the United Kingdom, was exhibited free to the public in the school for a fortnight. This collection was sent from London by the Science and Art Department for exhibition at the different towns in New Zealand where schools are in existence. There can be no doubt that our students, in common with others in the colony, will derive much benefit from having studied such works.

*Palmerston North Branch Classes.*—At the request of the Board, I inspected Mr. Watkin's work as instructor of these drawing classes, held on Saturdays in the College Street school, Palmerston North. These classes were commenced during the last term of the preceding year with the large attendance of forty-three students. Last year the attendances were, for the three terms respectively, thirty-six, twenty-five, and thirty-four. On my visit to the classes last term I found twenty-seven students on the roll. These are divided into three classes, each class taking two sections of drawing, as required for the pupil-teachers' examination, as follows: Ten cadets and three third-class pupil-teachers take freehand from flat examples, together with scale-drawing; eight second-class pupil-teachers take practical plane geometry and freehand drawing on the blackboard; six first-class pupil-teachers take practical solid geometry and model-drawing. At my request Mr. Watkin gave the freehand, model, and solid geometry classes instruction on the blackboard. Scale-drawing was partly taken, but time was not available for either plane geometry, students' freehand on the blackboard, or the more important section of scale-drawing. From Mr. Watkin's training as a primary school teacher, his method of imparting the knowledge he possesses is clear; and, although his work on the board before the class was at fault in a few cases where technical knowledge was required, I hope, now that he is giving five days a week to study here, he will become proficient not only in the elementary work he is taking at Palmerston, but in the more advanced studies on which he is now entering with a view to becoming a certificated art master.

The accommodation at these classes, both as regards the instructor and students, could scarcely be more unsatisfactory. This will be readily understood when it is mentioned that the floor of the room is closely packed for over three-quarters of its area with children's desks, on a very slightly stepped floor. It is a work of extreme difficulty for an adult to do any kind of work, let alone drawing, at these seats and desks, which are fixed together, after he has succeeded in squeezing on to the seat.

In my last annual report I suggested that a branch technical school might be opened at Palmerston, and I am glad to know that the Board is considering the question. I feel sure that, with the population Palmerston possesses, such a school will be successful if a central site be obtained and a competent instructor appointed.

*New Classes.*—Before closing this report I wish to refer to the new classes that were commenced at the beginning of the year, as the result of the enlargement of the school. The additional accommodation is as follows: A room 60 ft. long by 28 ft. wide, with a corridor 7 ft. wide leading to a new female lavatory 17 ft. by 9ft. The lecture-room has been extended 10 ft., beneath which a workshop for woodwork, 22 ft. by 15 ft., is provided. The large room just added is divided into two parts by a movable partition placed 20 ft. from one end. The larger part, 40 ft. by 28 ft., is devoted to drawing and painting, and the smaller part, 20 ft. by 28 ft., is used for building construction and machine

drawing. Needlework and dressmaking is taught in this division of the room. The former art-room, 20 ft. by 26 ft., is now used for wood-carving and modelling in clay.

The workshop has been fitted with benches to accommodate ten students; saws, planes, and all the necessary tools have been provided by the Board, together with a lathe, 6 in. centres, for wood-turning. In the wood-carving and modelling room, a complete set of carving tools for the use of the instructor, six benches for carving, and the necessary stands and stools for modelling in clay have been provided, together with a supply of excellent clay obtained from the Milton Pottery Company, of Otago. In the art-room we now have four full figures—the Fighting Gladiator, the Discobolus, the Dancing Faun, and the Venus de Medici—the minimum number required by the Science and Art Department for their examination in antique work.

Although the new work was not commenced till the quarter just ended, and therefore a report thereon belongs to that of this year, it may be advisable to mention the different classes now being held in the school. In addition to drawing, painting, machine-drawing, and building construction classes formerly carried on, and which numbered 152 last term, 127 new students received instruction in the following subjects: Wood-carving, 14; modelling in clay, 2; bench woodwork, 18; needlework, 5; dressmaking, 11; mathematics, 18; experimental science, 25; botany, 3; shorthand, 5; Latin and English, 18; university work, 8: total, 278—more than double the number (132) for the preceding term. This must be considered a very satisfactory beginning; and, although it is to be hoped that these numbers will not only be maintained but increased, the continued success of these classes depends very largely on the instructors. This success is determined not so much by the capability of an instructor to execute first-class workmanship in any particular branch of handicraft as by his ability as a teacher to impart his technical knowledge and manual dexterity to the different students of his class. And although these qualifications are by no means common in an every-day workman, especially when he is new to his duties as a teacher, they may be acquired to a certain extent by patience and experience.

In closing this report I wish to express my thanks to the Board for these long-delayed additions, and for the liberal manner in which my suggestions in connection with the increased usefulness of the school have been adopted. To Mr. Babbage, who has been my assistant for over three years, my thanks are due for his courteous manner and his willing work.

I have, &c.,

The Chairman, Wanganui Education Board. DAVID BLAIR, Director.

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## WELLINGTON TECHNICAL SCHOOL.

### DIRECTOR'S REPORT.

SIR,— 10th March, 1898.

I have the honour to submit my report upon the primary drawing and manual and technical instruction under my direction:—

*Primary Work.*

Drawing and kindred subjects have progressed very satisfactorily during the past year. Schools having over thirty scholars have this year received a visit of inspection, and have thus been placed in a position to carry out the requirements more efficiently. Clay-modelling and flat-tinting have both received considerable attention; in the latter case I hope to see the development of brushwork in colour in a marked degree upon the lines suggested by Frank Jackson's drawing-cards, as published by A. M. Holden, of London. Scholars having passed the four drawing sections will find these cards interesting and instructive. The cards may also be used to enlarge from, and for design in its simplest form of borders and patterns of various kinds. In clay-modelling an interesting series of exercises for the standards is published by E. J. Arnold and Son, of Leeds, but in all cases where possible it is better to let the children handle the object to be copied than to work from printed examples, which should only be used as suggestions for the teacher. I shall be glad to see this work considerably extended. In freehand drawing there is a tendency to draw only from Bacon's charts. This is not altogether advisable; enlarging the example from small cards (Bacon's or Jackson's) should also be practised, particularly by those likely to present themselves for examination. Geometrical and scale drawing are of about the same quality as last year. I am anxious that more work in the latter subject should be done from actual objects: there is great danger in using a chart or copy that the aim of scale work will be utterly defeated. Every alternate sketch should be made from actual measurement of some object or portion of the room, as school furniture, door, window, shelter-shed, school-ground, fireplace, &c.; and, in case of copies, surveyors', carpenters', or builders' plans should be used. The use of scale, chart, or book only is not sufficient. Greater attention is required to the condition of the instruments used in geometrical and scale drawing. Model-drawing is making a steady advance.

*First-grade Drawing Examination.*—In this examination the following were the results: The total number of papers issued was 7,020, and the number worked 6,381: passed, 3,856; failed, 2,525. Freehand, 1,988 papers worked—1,165 passed, 823 failed; geometry, 2,052 papers worked—1,331 passed, 721 failed; scale, 1,489 papers worked—931 passed, 558 failed; model, 852 papers worked—429 passed, 423 failed. Number of papers "excellent," 359; number of papers "good," 528; individual candidates, 4,532; individual passes, 3,082; schools presenting candidates, 127. 792 papers were taken by schools not under the Wellington Board, and 489 passes were recorded. The total number of papers worked, 6,381, shows an increase upon that of last year of 775 papers. The following shows the result of this examination in 1895–96–97 in the

Wellington Education District: Papers worked—1895, 5,242; 1896, 5,089; 1897, 5,589. Papers passed—1895, 3,116; 1896, 3,306; 1897, 3,367. Papers failed—1895, 2,126; 1896, 1,783; 1897, 2,222.

There is an increase of 426 individual candidates and 119 individual passes upon 1896. The number of schools represented under the Wellington Board is ninety-four, an increase of eleven upon 1896. The number of papers applied for outside the Wellington District was 792, of which number 489 passed. This is an increase of 355 papers upon last year; the number of schools represented being thirty-three, as against sixteen last year. The following are the schools represented:—Marlborough District: Blenheim Boys', Havelock, Fairhall, Spring Creek, Deep Creek, and Te Weka. Westland District: Kumara, Hokitika, and Jackson. Greymouth District: Greymouth, Paroa, Totara Flat, Stillwater, Greenstone, and Taylorville. Nelson District: Westport Boys', Girls' College, Boys' Central, Granville, and Toi Toi Valley. Convent of Mercy, Christchurch; St. Patrick's College, St. Francis Xavier's, and St. Mary's, Wellington; St. Joseph's Convent, Lyttelton; St. Mary's, Hokitika; All Saints', Greymouth; St. Joseph's, Kanieri; St. Patrick's, Masterton; St. Patrick's, Kumara; Wesleyan Day School, Wellington; Miss Haase's, Lower Hutt; and Wanganui Collegiate School. The total number of certificates issued in connection with this examination since its inauguration in 1884 is 26,731.

*Manual Instruction.*—This subject will never be successfully dealt with under the present conditions of being taught outside school-hours. The arrangements under which this subject is taught in England are such that the classes meet during school-hours at defined centres: thus whole classes are dealt with in an efficient manner. Should we obtain the proposed addition to the Technical School I hope to effectively deal with manual instruction and domestic economy for all city and suburban schools.

Country classes have been held at Cross's Creek, Paraparaumu, and Mauriceville West, the numbers being as follows: Mauriceville West, 20; Cross's Creek, 18; Paraparaumu, 11. In both the latter places the classes have been unfortunate in losing their instructors through removal to other districts: this has seriously interfered with the progress of the classes. At Cross's Creek, where excellent work was being done, the workshop (the property of the Railway Department) was required for other purposes. The class was compelled to cease work for a time, but resumed under difficulties during the last quarter. I regret the removal of Messrs. Heywood and Foster, who, as instructors, were the means of establishing manual instruction in the two places named. At Mauriceville West, Mr. Joplin has kept his class well together. In his report he states that "the interest of the boys in their work is increasing with their progress, and that some of the best work is done by Third Standard boys." He furthers says, "I have observed that the ordinary school-work of those attending the class shows more intelligence than that done by boys who do not attend, particularly where reflective work is necessary." Settlers from all parts of the district have visited the class, and begin to understand the importance of the work to an agricultural settlement. Mr. Joplin concludes by saying, "Like every innovation, manual instruction is little understood, and its good effects cannot be appreciated until it is more fully explained to teachers and the people. Money and time spent on its behalf by the Government will return fiftyfold." Dalefield has made provision for opening classes, but, owing to necessary transfers of land, the work will not be in operation for about three months.

As a means of bridging the gap between the occupations of the primer classes and the upper standards, cardboard-modelling has been found an effective study, cultivating habits of order and exactness, quickness, and manual dexterity. Circulars have been issued giving details and suggestions for the increased working of cardboard work, clay-modelling, and model-drawing. These, I trust, will materially aid the primary work, as upon the progress of this must depend the success of technical education.

*Scholarships (Primary).*—The work of the sixty-two scholars holding scholarships has been satisfactory, the course including model, freehand, and elementary light and shade, and manual instruction in woodwork for boys, and clay-modelling for girls. In the latter subject some very excellent examples in ordinary modelling from the cast were produced. The amount of time available for freehand and elementary light and shade was, owing to the wood- and clay-work, considerably curtailed. The scholarships are enabling very useful work to be done, and act as a connecting link between the primary and technical school. That they are appreciated is evident from the fact that again over 180 competed for the fifty first-year vacancies. The competition produced work equal to second grade by a considerable number of scholars, and in such cases certificates were awarded.

*Instruction to Teachers and Pupil-teachers* has been continued as usual, and I am glad to report that considerable interest is manifest in all branches of work. The geometrical and perspective classes have this year done good work. Appreciation is shown of the advantage offered to teachers of attending the classes after they have completed their full second-grade certificate. The efficiency of such teachers will thereby be increased, and should benefit the schools largely. The correspondence class work has considerably improved. The work has been defined in the various sections for each month with very beneficial results. The revision takes place the last Friday in each month, and the work is returned with remarks and corrections, together with requirements for the next month's work.

The following classes are held on Saturday, and are free to all teachers in the Board's service: Drawing in all branches—model, geometrical, perspective, freehand, light and shade, and colour; manual instruction in wood and in clay. Singing: Sight-singing, voice-training, and methods of teaching. For the class in wood-carving for teachers a fee of 10s. per quarter is charged.

*Teachers' Drawing Certificates.*—The following statement shows the position of teachers in the Board's service in relation to drawing: Head-teachers—thirty-four hold full certificates, fifty-nine

hold sectional certificates, thirty-seven hold no certificates; assistant teachers—thirty-two hold full certificates, forty hold sectional certificates, ten hold no certificates; ex-pupil-teachers—twenty-eight hold full certificates, thirty-two hold sectional certificates, two hold no certificates; pupil-teachers—fifteen hold full certificates, seventy-four hold sectional certificates, twenty-three hold no certificates.

*Technical School.*

*Number of Students.*—Day classes: Design—First quarter, 25; second, 27; third, 20; fourth, 20. Anatomy—First quarter, 25; second, 17; third, 12; fourth, 11. Drawing and painting (whole-day students)—First quarter, 13; second, 14; third, 14; fourth, 14. Drawing and painting (half-day students)—First quarter, 63; second, 69; third, 65; fourth, 62. Geometry and perspective—First quarter, 25; second, 23; third, 20; fourth, 21. Secondary-school scholars (drawing)—First quarter, 0; second, 26; third, 18; fourth, 18. Secondary-school scholars (carpentry)—First quarter, 0; second, 27; third, 24; fourth, 21. Primary-school scholars—First quarter, 61; second, 57; third, 54; fourth, 51. Teachers and pupil-teachers—First quarter, 92; second, 89; third, 96; fourth, 98. Wood-carving—First quarter, 6; second, 8; third, 13; fourth, 11. Manual instruction—First quarter, 4; second, 7; third, 8; fourth, 5. Advanced geometry—First quarter, 0; second, 7; third, 0; fourth, 0. Evening classes: Architectural and building construction—First quarter, 24; second, 28; third, 31; fourth, 27. Mechanical drawing—First quarter, 31; second, 40; third, 45; fourth, 39. Drawing—First quarter, 76; second, 75; third, 85; fourth, 78. Life class—First quarter, 5; second, 6; third, 9; fourth, 8. Practical plumbing—First quarter, 21; second, 27; third, 25; fourth, 27. Theory of plumbing—First quarter, 18; second, 16; third, 19; fourth, 16. Wood carving and modelling—First quarter, 15; second, 24; third, 22; fourth, 18. Mathematics—First quarter, 27; second, 34; third, 32; fourth, 31. Joinery, handrailing, and carpentry—First quarter, 14; second, 24; third, 8; fourth, 0. Shorthand—First quarter, 6; second, 6; third, 5; fourth, 9.

The following occupations are represented amongst the students of the evening classes: Lithographer, 1; cutter, 1; mechanics, 2; watchmaker, 1; drapers, 2; typist, 1; bootmaker, 1; engineers, 46; watchmaker, 1; joiners, 4; carpenters, 34; cabinetmaker, 1; plumbers, 28; clerks, 15; painters, 4; dairyman, 1; builder, 1; architects' assistants, 3; draughtsman, 1; teachers, 26; warehousemen, 2; clothiers, 2; boilermaker, 1; scholars, 8; Civil servants, 3; mason, 1; students, 25; farmers, 2; printer, 1; tailors, 3; cadets, 3; bookkeeper, 1; surveyors, 2; agent, 1; surgeon, 1; fitters, 3; grocer, 1; japanner, 1; butcher, 1; packers, 2.

*Drawing, Painting, and Elementary Modelling (Day and Evening).*—Mr. H. S. Wardell examined these sections and expressed satisfaction with the results obtained, and the progress of the school during the past year. The classes in design have received every encouragement and done good work, and I am satisfied that the evening class will be equally successful. The want of good illustrations is a serious drawback, but this I hope to overcome by selections of designs from various illustrated art papers, and from purchased examples. Memory-drawing, monthly competitions, and occasional set subjects have been continued as hitherto. There is, as is always the case, a difficulty in persuading students to practise 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. The question of reflected light, shade, shadow, direction of light, and, most important of all, the actual forms requiring to be expressed, should receive very careful consideration. A student should be able to model from memory a cast or model after once drawing the same; this alone is the real test of knowledge. If a mere copy is made, it is hardly worth the paper it is drawn upon, from a knowledge point of view.

There is still considerable objection on the part of many evening students to take up the subjects of practical geometry and model-drawing, as a groundwork upon which to base their future study, applicable to trade purposes. All constructive trades require this knowledge: it means a great saving of time, money, and labour to those who have that grounding. I recommend that in 1899 all trade students under twenty who have not gone through such a course, or its equivalent, shall be required to do so, for without it a considerable waste of the instructors' time takes place, and it is of the highest importance to the student himself.

*Machine Construction and Drawing.*—This class has steadily increased in number. The work was examined by Mr. Fulton, C.E., theoretically and practically. After reporting the results as exceedingly satisfactory, he states that "The answers generally to questions concerning the design, or improvements in designs, of the machines as drawn were intelligently given, and showed a good knowledge of the work in hand. As a knowledge of mechanical drawing is essential in up-to-date machine-shop practice, the value of the work that is being done in the class cannot be overestimated." I regret very much that the applied-mechanics class cannot be held owing to an insufficient number of students presenting themselves.

*Architectural Drawing and Building Construction.*—This class, I am glad to report, has considerably increased in number. Mr. Crichton, who examined the work, reports that "All the students have a fair grasp of constructional detail, and the draughtsmanship throughout was excellent." I consider the work generally decidedly in advance of last year. The Wellington Dramatic Students' Performance Fund has enabled me to assist very materially the building and machine construction classes in the matter of diagrams, plates, and text-books up to date.

*Mathematical Class.*—A considerable increase in numbers has also taken place in connection with this class, proving that it has met a long-felt want. The subjects dealt with are arithmetic, geometry, algebra, Euclid, and trigonometry. Sections are arranged for beginners, as well as for candidates for matriculation, junior and senior Civil Service, pupil-teachers, South Kensington and degree examinations. No local examination was held in this case, the majority of the students desiring to enter for the Science and Art Department papers in June next.

*Plumbing—Theory and Practice.*—The numbers in attendance continue satisfactory. The examinations have been held as usual locally, and under the City and Guilds of London Institute. I am pleased to report an increased number of candidates in connection with the latter, many presenting themselves in the higher stages. Many students, although they have passed the necessary examinations, have returned to the classes to continue their studies. The necessity of studying practical geometry and model-drawing has been recognised by many, who found themselves unable to deal with the simplest problem of construction. The City Council have contributed this year £60 towards the working expenses of these classes. Charles W. Martin has completed his full technological certificate in plumbing of the ordinary grade, having passed in practical plane and solid geometry and building construction, in connection with the Science and Art Department, in accordance with the requirements of the City and Guilds of London Institute. This is the first full technological certificate obtained in New Zealand.

*Carpentry, Wood Carving, and Modelling.*—Good work has been done throughout the year in these subjects. I have been enabled by the Dramatic Students' Fund to purchase five portfolios of wood-carvings from the South Kensington Museum (by Eleanor Rowe), consisting of illustrations of English, Flemish, French, German, Italian, Spanish and Icelandic work. Further specimens have also been obtained from the School of Art Wood-carving, South Kensington, the whole forming a valuable addition to these classes.

*Shorthand.*—During the first two quarters this class had but a small attendance, probably owing to the fee being £1 per quarter; in the fourth quarter this was reduced to 10s., and the class increased by three. There is now, however, a class of eighteen, with an excellent prospect for the year. The sections of instruction are elementary, corresponding, and reporting.

*Practical Plane and Solid Geometry, and Perspective.*—These classes have been fairly well attended, but I am anxious to see the junior students, especially of the evening classes, make greater use of the facilities offered in this direction for obtaining a thorough grounding in the principles of their work. It is all very well to shirk this as drudgery in the first year's course, but the want of this knowledge, especially in mechanical pursuits, is a bar to satisfactory progress. I would urge all students joining the school to master these essential principles first, and so save themselves a considerable amount of time in after work.

*Advanced Joinery, Stair-work, and Handrailing.*—This class was fairly well attended during the first two quarters, but fell off considerably in the third quarter, and was discontinued in the last quarter. The class has, however, been re-established under the instructorship of Mr. Joseph Fossette, and gives evidence of success in its present stage. The class is held on Tuesday and Thursday evenings, from 7 to 9 p.m., the fee being 10s. per quarter.

*Wellington College.*—The numbers in attendance at the College drawing class have been respectively twenty-six, eighteen, and eighteen in the three terms, the work being confined to second-grade freehand, model, and elementary light and shade. Additional appliances have now been added by Mr. Firth, which will enable more thorough instruction to be given. The classes in manual instruction in wood-work have also been conducted by Mr. Barrett, instructor of the Technical School. The numbers under instruction were twenty-seven for the first term, twenty-four for the second term, and twenty-one the third term.

### *Examinations.*

There is an impression abroad that it is of no use attending the Technical School unless students are prepared to submit themselves for examination. This statement is injurious to the school. It is entirely at the students' option whether they present themselves or not. There are a very large number of students, particularly in art work, who never attend an examination. The first grade is for primary schools only. The second and higher grades, and the examinations of the Science and Art Department and the City and Guilds of London Institute, are solely for the behalf of teachers and trade students, who require to hold certificates. It is a great advantage to be enabled to hold examinations under the two latter bodies, for their certificates are recognised accepted by any body or society throughout the world.

The number of papers examined during the year was 7,548. The number of certificates issued was 4,608, exclusive of 290 full certificates in the various grades. The number of certificates issued in all grades since the school was established in 1886 is 33,114, subdivided as follows: Primary or first grade, 26,731; intermediate or second grade, 3,357; higher or third grade, 1,202; South Kensington, 1,740; and City and Guilds of London, 84.

*Second Grade (Local).*—Total number of papers taken, 538; subdivided as follows: Freehand (179 candidates)—Passed, 120; failed, 59. Geometry (90 candidates)—Passed, 52; failed, 38. Perspective (68 candidates)—Passed, 44; failed, 24. Model (154 candidates)—Passed, 100; failed, 54. Memory, blackboard (47 candidates)—Passed, 22; failed, 25. Excellent, 24; good, 29. Outside districts: Papers, 104; passes, 65; failures, 39. Number of individual candidates examined, 314; passed, 241. The most important feature in connection with this examination is the increase of 246 papers upon last year's numbers, and the much better results obtained in geometrical, perspective, and memory blackboard drawing.

*Third Grade (Local).*—Number of papers worked, 244; number of passes, 149; failures, 95. Number of individual candidates, 104; and passes, 79. Thirteen papers were excellent and twenty good.

### *Science and Art Department, South Kensington.*

In connection with the National Competition Florence Broome obtained sufficient marks to entitle her under the department's regulations to a free studentship for one year.

During the year a collection of works from South Kensington as a loan to the Education Department was exhibited in the main hall. The works were, however, to a very large extent

disappointing, inasmuch as a number were old works, and not by any means up to the present-day standard of excellence required by the department. I hope that the Education Department will again obtain a collection of works from the 1898 Competition, in order that we may have the latest possible information as to the nature of the work and the standard required.

*Art Class Teachers' Certificates.*—The following have this year completed this certificate: Jessie Newton, May Beecroft.

*Elementary Drawing Certificates, First Class.*—The following have obtained the full certificate: Ernest Ballachey, Jessie Newton. Students are again reminded of the requirements of the elementary drawing certificate; the subjects are as follows: (*a.*) Freehand drawing (subject 2B), a first-class pass. (*b.*) Model-drawing (subject 3A), a first-class pass. (*c.*) Shading from casts (subject 5B), a first-class pass. (*d.*) A pass in the elementary stage of science subject I. (geometry).

*Second-grade Art.*—Number of papers taken, 225: passed, 155; failed, 70. Freehand (92 candidates): First class, 35; second, 27; failed, 30. Model (70 candidates): First class, 13; second, 33; failed, 24. Perspective (20 candidates): First class, 10; second, 7; failed, 3. Light and shade (43 candidates): First class, 15; second, 15; failed, 13. Of the above number thirty-nine papers were taken by external candidates: eight obtained first class, sixteen obtained second class, and fifteen failed.

*Third-grade Art.*—Number of papers submitted, 76: passed, 63; failed, 13. Outline from cast (11 candidates)—Excellent, 0; first class, 9; second, 2; failed, 0. Light and shade from cast (23 candidates)—Excellent, 1; first class, 13; second, 9; failed, 0. Drawing from models (16 candidates)—Excellent, 0; first class, 10; second, 6; failed, 0. Design, advanced (2 candidates)—Excellent, 1; first class, 0; second, 0; failed, 0. Still-life (6 candidates)—Excellent, 0; first class, 2; second, 0; failed, 3. Antique (10 candidates)—Excellent, 0; first class, 0; second, 5; failed, 5. Principles of ornament (1 candidate)—Excellent, 0; first class, 0; second class, 1; failed, 0. Design, elementary (3 candidates)—Excellent, 0; first class, 0; second, 1; failed, 2. Drawing from life (4 candidates)—Excellent, 0; first class, 0; second, 1; failed, 3.

*Science.*—Number of papers submitted, 48: passed, 26; fair, 7; failed, 15. Plane and solid geometry (17 candidates)—Passed, 3; fair, 3; failed, 11. Machine construction (8 candidates)—Passed, 7; fair, 0; failed, 1. Building construction (11 candidates)—Passed, 9; fair, 1; failed, 1. Mathematics, 1, 2, and 3 (11 candidates)—Passed, 6; fair, 3; failed, 2. Magnetism and electricity (1 candidate)—Passed, 1; fair, 0; failed, 0. Of the above the external papers numbered 12—Passed, 4; failed, 8. The number of works accepted towards the art class and art masters' certificates was eleven.

*City and Guilds of London Institute for the Advancement of Technical Education.*

The examinations under this department have been conducted as usual. The number of papers examined was 36: passed, 21; and failed, 15. Plumbing, theory (20 candidates)—Passed, 12; failed, 8. Plumbing, practice (14 candidates)—Passed, 7; failed, 7. Mechanical engineering, Parts I. and II. (1 candidate)—Passed, 1. Telegraphy and telephony (1 candidate)—Passed, 1.

*Prize List.*

Prizes were awarded in the various classes for the year's work ending December as follows: Day classes, for the best progress; evening drawing class, for the best progress; students in connection with the building trade, for the best general progress, advanced section; students in connection with the building trade, for the best progress, elementary section; mechanical students, for the best mechanical drawing; mechanical students, for the best progress in first year's work; mechanical students, for the best progress in the advanced section; for the best set of subject sketches; the best set of still-life studies; the best set of designs, advanced; the best set of designs, elementary; the best set of memory drawings; teachers' classes, for the best progress; primary-scholarship holders, for the best progress; wood-carving, evening classes, best progress; boys' manual-instruction classes, best progress.

*Library.*

The library now consists of 475 volumes upon technical, science, and art subjects. Over two hundred volumes have been circulated amongst the students in connection with their special requirements and trades. The additions to the library during the year have been as follows: Mechanical section.—Machine Construction and Drawing, Elementary (H. Adams), Machine Construction and Drawing, Advanced (H. Adams), Manual of Rules, Tables, and Data for Mechanical Engineers (D. K. Clark), Pocket Book of Engineering Formulæ (Molesworth), The Electrician (3 vols., 1894, 1895, 1896, sixteen plates Mechanical Drawing), The Engineer (2 vols., 1896), Engineering Journal (2 vols., 1896), Text-books of Science, Metals (Huntington and McMillan). Architectural section.—Eighty plates Building Construction (Mitchell), Architectural Surveyor's Handbook (Hurst), Architecture (1 vol., 1896). General and art section.—Polychromatic Decoration as applied to Buildings (W. and G. Audsley), Wood-carving (J. Phillips), The Idler (2 vols., 1895, 1896), The Studio (1896), Decorative Art (1896), Magazine of Art (1896), Art Journal (1896), Education (Vol. 1, 1896), Metal Work (C. J. Leland), A Handbook of Art Smithing (F. S. Meyer), Practical Technical Instructor in Art and Crafts (W. McQuhal), Decorators' and Artisans' Handbook, French Wood-carvings (3 vols., eighteen plates in each), The Native Flowers of New Zealand (Mrs. C. Hetley), Elements of Descriptive Geometry (J. B. Miller), Work (2 vols., 1896), Nature in Ornament (Lewis F. Day), The Planning of Ornament (Lewis F. Day), Some Principles of Every-day Art (Lewis F. Day), The Anatomy of Pattern (Lewis F. Day), The Application of Ornament (Lewis F. Day), A Handbook of Ornament

(Meyer), Elementary 2nd Grade Perspective (2 vols., H. J. Dennis), Gothic Wood-carving (Grallan), Blackboard Drawing (M. Swannell), Guide to Drawing Examinations (Hilliers), Royal Academy Pictures (1893); Studies from the Museums—"Embroidery," "Hand-made Lace," Wood-carving (3 folios); Horses and Stables (2 vols., Sir F. Fitzwygram), Strand Magazine (3 vols., 1894–95–96), Practical Horse-shoeing (G. Fleming), Art Smithing (Meyer).

*Periodicals.*—The following contributions have been received: The Engineer, from the publishers; Work, from Messrs. Cassell and Company; The Decorator, from Messrs. Baillie Brothers; Architecture, from J. McKay, Esq.; Engineering, from the Education Board; The Idler, from J. A. Tripe, Esq.; The Artist, from the Education Board; The Art Journal, from J. Pearson, Esq.; Magazine of Art, from Dr. Grace; Education, from the publishers; Building News, from W. Crichton, Esq.; The Studio, from J. M. Nairn, Esq.

The above are placed for the use of the students, and at the end of the year are bound and added to the library.

A drawing of the figure (antique) by Goldsmith, was presented by C. Long, Esq.

*General.*

*Dunedin Art Societies' Exhibition.*—At the request of this society a collection of students' work in design were forwarded for exhibition, the cost being borne by the society.

*Prize Designs.*—In July, Messrs. W. and G. Turnbull offered prizes of £20 for the first prize and £10 for second prize for a show-card for Empire Company's teas, the competition to be confined to registered students of the technical schools of New Zealand. Both prizes were awarded to Florence Broome, of the Wellington School. The Christmas-card from the General Post Office for 1897 was also designed by the same student.

*Loans, &c.*—Art objects have been kindly lent by His Excellency the Governor, the Colonial Museum, Messrs. Edward Anderson and Co., and the Dresden Company.

*Finance.*—The total cost for the year is £2,083 5s. 8d. The total receipts amount to £1,430 6s., leaving a balance of £652 19s. 8d. As against this sum the following items are chargeable: Instruction to ninety-four teachers at 15s. per quarter, £282; instruction to sixty-two scholarship-holders at 10s. per quarter, £124; instruction to fifteen teachers in evening classes at 7s. 6d. per quarter, £22 10s.; cost of primary examinations, £115; inspection of schools and correspondence-class work, £153 10s. Sundry amounts are due to the extent of about £15.

My thanks are due to all those whom I have named, and who have so generously contributed to the successful year's working, either by loans or contributions of prizes, books, periodicals, or appliances; to Messrs. J. Fulton, C.E., W. Crichton, and H. S. Wardell, who acted as honorary examiners; to the supervisors, and to my staff, of whom, for their energy and very sincere interest in the welfare of the school, I cannot speak too highly.

I have, &c.,

The Chairman of the Education Board. ARTHUR D. RILEY.

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MASTERTON TECHNICAL SCHOOL.

ANNUAL REPORT TO THE TOWN LANDS TRUSTEES.

THE work of the year was commenced in uncertainty as to the amount of financial assistance your Trustees would grant, and the question of ways and means needed, and has received, very careful consideration at the hands of the Committee. A grant of £150 was applied for, and £100 was voted. The proposals of the Committee had therefore to be considerably reduced. It was determined to continue, if possible, the classes established, and it is with pleasure the Committee report that they were able to continue all the classes till the end of the year. At the same time they regret they were not able to do more in the way of technical education.

The following classes were carried on during the whole of the three sessions:—

*Drawing.*—This class has been instructed by Mr. H. D. Turner, who holds a teacher's certificate under the Department of Science and Art, South Kensington, London. The work of the class has progressed most favourably. Some of the students entered for the South Kensington Art Examinations and some for the second-grade art examinations in connection with the Wellington Technical School. In the South Kensington examinations the following students passed:—Freehand: M. Farmer (first-class certificate), E. M. Johnston, Cosmo Beale, K. Farmer, H. Chisholm, H. Nettlefold, K. Campbell. Perspective: F. C. Daniell (first-class certificate). In the Wellington Technical School second-grade art examination the following passed:—Freehand: Nellie Hogg, H. Nettlefold, E. Peterson, B. Wallis, A. R. Wintringham. Geometry: E. Wallis (excellent). Model: K. Campbell, Nellie Hogg, Bennett Iorns, E. M. Johnston, E. Peterson, A. R. Wintringham, I. Wintringham. Perspective: F. C. Daniell. The pupils worked under the disadvantage of a small and badly lighted room, and also for want of a good supply of models and material. The interest taken in their work and the excellent record of attendances and examination results are greatly to the credit of the class and its instructor. During the last two sessions the average attendance in this class has been twenty-six out of a total roll-number of thirty-two.

*Agricultural Chemistry.*—This class has been under the tuition of Mr. B. J. Dolan, who holds high certificates in chemistry, and has distinguished himself as a science student. In this class a comprehensive and interesting programme of work, on the lines of the South Kensington Science and Art Department's syllabus, has been gone through. Practical work, such as the testing of soils, has been done both by demonstration and also by the pupils. The lessons have been fully illustrated by experiments. The scientific apparatus at the public school has been made free use of, and a good supply of apparatus and chemicals has been obtained for the special use of the class. The lessons have, therefore, been of a very interesting and useful character. The Committee hope that a large number of young students will enter for this class when the new session commences.

*Shorthand.*—This class has been instructed by Mr. D. S. Papworth, whose practical knowledge of the art and daily use of it thoroughly qualify him for teaching the subject. Successful work has been done by this class, several of the pupils having made considerable progress, while several are now able to make use of their newly acquired art in their office work. From the number of inquiries made by intending pupils it is probable a fairly large class will be formed.

*Book-keeping.*—This class was at its inauguration undertaken by Messrs. Keith and Sellar. During the first session this was the most popular class, the roll-number being thirty-six. Mr. Keith resigned his position at the end of the first session, and the class has since been carried on by Mr. Sellar. Excellent work has been done, and very great interest has been taken by the pupils in the subject. Several members of the class have bettered their positions by the knowledge of book-keeping obtained by attending this class.

*General Knowledge.*—This class has been taught by Mr. R. Darrock and Mr. B. J. Dolan, arithmetic having been taken by the former, and English by the latter. Particular attention has been paid to commercial arithmetic and correspondence. Good work has been done by teachers and pupils. At the close of the session the members of this class unanimously thanked the Technical School Committee for having established the class, and the teachers for their zealous work.

It is very pleasing to the Committee to be able to report so favourably of the working of the classes. In spite of the many interferences and inconveniences that pupils and teachers have had to put up with, no class has fallen through. On numerous occasions the pupils have met at their class-room for their usual instruction only to find that the rooms were occupied and that no classes could be held. Many of the pupils had to walk or ride a considerable distance to attend their classes, and it is a matter for surprise that these discouragements had not the effect of breaking up the classes. It is hoped that these interferences will be obviated during the current year. In order to create an interest in the technical classes, the Committee made arrangements for several popular science lectures, and during the year very able addresses were delivered by Sir James Hector, M.D., on "Antarctica"; by Rev. J. T. Nott, on "The Moon"; by Mr. Charles Hulke, F.C.S., on "Milk-testing"; and by Mr. T. W. Kirk, Government Biologist, on "Insect Pests." A course of lectures on "Political Science" was delivered under the auspices of the Committee by the Rev. A. C. Hoggins, B.A. The Committee hope to be able to arrange for other popular science lectures during the present year.

Following the precedent of the Wellington Technical School Committee, this Committee decided to award free drawing scholarships to those pupils who succeeded in obtaining full first-grade drawing certificates in the examinations held by the Wellington Education Board—a full certificate comprising a pass in freehand, model, geometrical, and scale drawing. These scholarships were awarded to the number of fifteen. The holders of them have, by their application to their work and by their exceedingly regular attendance, shown their appreciation of the privileges conferred. Four of these scholarship-holders have each passed this year in two second-grade art subjects, and three others have each passed in one subject.

The Committee desire to carry on the classes already established, and to add to them, if possible, classes in cookery, dressmaking, and woodworking. To enable the Committee to carry out these proposals they ask the Trustees to allocate the sum of £150 for the current year. The general unsuitability of the drill-shed has been fully demonstrated during the past year, and the Committee therefore earnestly desire to see a new building provided for technical education in Masterton—a building specially adapted, and one which will be in keeping with the importance of the town and its future prospects. This Committee has reason to believe that if the Trust will provide a suitable site, a grant for a building would be given by the Government.

Accompanying this report is a statement of receipts and expenditure for the past year, and also a return showing the number of pupils and attendance in the various classes.

*Summary of Pupils and Attendances.*

| Class. | First Quarter. | | Second Quarter. | | Third Quarter. | |
|---|---|---|---|---|---|---|
| | Meetings. | Average Attendance. | Meetings. | Average Attendance. | Meetings. | Average Attendance. |
| Drawing ... ... | 22 | 15 | 25 | 26 | 22 | 26 |
| Agricultural chemistry ... | 11 | 7 | 13 | 11 | 11 | 7 |
| Shorthand ... ... | 8 | 10 | 12 | 8 | 11 | 9 |
| Book-keeping ... ... | 11 | 25 | 12 | 16 | 9 | 10 |
| General knowledge ... | 17 | 15 | 26 | 18 | 21 | 16 |

BALANCE-SHEET for YEAR ending MARCH, 1898.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| By Balance in bank .. .. .. | 19 | 16 | 4 | To Salaries .. .. .. .. | 209 | 15 | 7 |
| Town Lands Trust .. .. .. | 175 | 0 | 0 | Advertising and printing .. .. | 7 | 19 | 10 |
| Fees and lectures .. .. .. | 53 | 18 | 6 | Apparatus .. .. .. .. | 11 | 9 | 1 |
| Dr. balance .. .. .. .. | 25 | 7 | 9 | Furniture .. .. .. .. | 7 | 18 | 0 |
| | | | | Stationery .. .. .. .. | 1 | 4 | 3 |
| | | | | Amount paid lecturers .. .. .. | 6 | 13 | 0 |
| | | | | Gas-fittings .. .. .. .. | 0 | 19 | 3 |
| | | | | Cleaning .. .. .. .. | 0 | 15 | 0 |
| | | | | Sundries .. .. .. .. | 1 | 4 | 2 |
| | | | | Fees returnable for regular attendance .. | 9 | 13 | 0 |
| | | | | Outstanding accounts .. .. .. | 16 | 11 | 5 |
| | £274 | 2 | 7 | | £274 | 2 | 7 |

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MANUAL-TRAINING CLASS, MAURICEVILLE WEST PUBLIC SCHOOL, WELLINGTON.

MASTER'S REPORT.

SIR,— The School, Mauriceville West, 19th February, 1898.

I have the honour to submit the following report on the manual-instruction class, for the year ending 1897, held in connection with this school:—

At the beginning of the year there were sixteen pupils on the roll; at the end, eighteen. The capitation received by the School Committee for the year amounted to £11 17s. 6d. The Committee hand me the capitation as payment for my services as instructor, with the understanding that I find necessary tools and timber for the use of the class. The following is a list of the tools, and the sources from which I obtained them:—Purchased through first capitation, and public subscription: One half-rip saw, eight chisels, one tenon-saw, one draw-knife, two mallets, two screwdrivers, one spokeshave, two set-squares, one pair wing-compasses, one two-foot rule, one claw-hammer, one level square, one dozen lead-pencils, four bits, one oilstone, one punch, one wood-rimer, two German bits, one jack-plane, one smoothing-plane, three gauges, one screw-driver-bit. From Education Board: Three squares, six gouges, eight chisels, fourteen bench-stops, four new mallets. From self, for use of the class: One grindstone, two iron bench-screws, one iron block-plane. In addition to the above, I lend the pupils my private tools, including brace, saws, planes, bits, &c.

Considering the time I have devoted to this work I think my remuneration is very insignificant, and it is apparent to me that if the instructor wishes his pupils to be successful this special labour must be more seriously treated than as a mere hobby. The interest the boys show in their work does not flag, but increases as they progress. The syllabus, as far as I have worked, seems to fall well within the scope of the boys—*i.e.*, a year's work as set out by the department can be readily done. Some of them are doing work set for the second year. Boys from the Third to the Seventh Standards attend, and I find the best work is not done by those in the higher standards, as one might expect, but the Third Standard boys can hold their own against some of the upper. The pupils thoroughly realise that they are not compelled to attend the classes, and their parents' permission must be obtained.

I have observed that the ordinary school work of those attending the class shows more intelligence than that done by boys who do not attend. Boys, too, who come from other schools are generally, if not always, behind my pupils, although in the same stardard, particularly where reflective work is necessary. As in ordinary school work, too, those who attend the manual-instruction class regularly are better workers than those who are irregular. The irregular attendance is not due to the boys but to the parents, who keep them at home more often some part of the year than at another—viz., at potato-dibbing, hay-making, potato-picking, and grass-seed cutting.

Whether it would be more advantageous to hold the class during school hours or after I have not determined to my satisfaction. I often wonder if the boys are fatigued after their mental work of five hours, and need rest before touching tools. Sometimes I think they are not only fatigued, but hungry, as they bring only a light luncheon of bread and butter—not much nourishment for a growing boy—which is generally eaten during the ten minutes allowed for recreation. If—and I believe it is so in this and other districts—boys rise early, milk cows or work about the farm, breakfast early, work well in school, and play hard, they must feel hungry before mid-day, and possibly exhausted mentally and physically by the time for dismissal at 3 o'clock. Whether they are too tired or not for manual instruction I am unable to say until I make inquiries. It is receiving my earnest consideration, and as soon as I am satisfied either way I will inform you. Perhaps it would be better for teacher and pupils if the class were held during school hours. In England the teacher could leave out science and another subject, the latter to be approved of by the Inspector, if he held a manual-instruction class.

I can confidently say that the average English school-boy enjoys greater facilities for receiving manual instruction than the average colonial. There is as much difference between English and colonial school-boys as between chalk and cheese. Our country boys are in different circumstances altogether; their domestic life and surroundings, their characteristics, their temperaments, their mental faculties, their keen sense for sport, their precocity, their independence, and above all the influence, though perhaps they are unconscious of it, of the climate and physical features of

the islands, all tend to make a prominent distinction. When I was in England I studied the English school-boy's characteristics, and compared them with ours. The framers of our educational Acts never took these strongly marked differences into consideration when drawing up the syllabus.

Settlers from all parts of this district have visited this manual-instruction class, and have expressed great surprise at the good quality of the boys' work. They never thought the work of such great importance until they saw it. Some had the idea that manual instruction was a sort of manual exercise as taught by military drill. Not only settlers, but competent carpenters have seen the boys at work, and have said that had they received such a training when they were at school they would have been more useful to their masters in their apprenticeship. Members of several School Committees have also seen the work of the class, and expressed a wish that it was introduced in their schools. Like every innovation, manual instruction is little understood, and its good effects cannot be appreciated until it is more fully explained to teachers and people. Money and time spent on its behalf by the Government will return fifty-fold.

Yours, &c.,

Mr. A. D. Riley, Director, Technical School, Wellington. CHARLES R. JOPLIN.

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MANUAL-TRAINING CLASS, PARAPARAUMU PUBLIC SCHOOL, WELLINGTON.

INSTRUCTOR'S REPORT.

Paraparaumu, 7th January, 1898.

I BEG to submit my report of Paraparaumu Technical School for 1897. The class commenced in February with about a dozen boys. The attendance during the quarter was not good, several not attending more than once. The instruction was given by Mr. Davies, carpenter, and the head-teacher, and the duration of class was between one and two hours per week. During the second and third quarters the instruction was generally given by the head-teacher alone, as Mr. Davies was often away from home. In the last quarter instruction was given for two hours each week by the head-teacher. Ten lessons were given, and the average attendance was six. The chief difficulty met with is that the elder boys cannot be spared from their farm duties very often, and the younger ones have not sufficient strength to use the tools properly.

J. A. SMITH, Instructor.

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WESTPORT TECHNICAL CLASS.

SECRETARY'S REPORT.

I HAVE the honour to report that the first term, January to March, fell through. In the second term there were six pupils, and in the third term seven pupils. The school received this year the sum of £19 3s. 3d., made up as follows: Balance from last year, 18s. 9d.; fees (10s. 6d. per pupil), £6 16s.; Government subsidy, £11 7s. 3d. The expenditure was £20 3s. 3d. Messrs. George Turner and E. B. B. Boswell have acted as teachers, receiving the pupils' fees as their remuneration. There have been two examinations (South Kensington), one of eleven applicants with seventeen subjects, and the last, two applicants with three subjects.

FRANK SLEE, Honorary Secretary.

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MANUAL-TRAINING CLASS, KUMARA PUBLIC SCHOOL, WESTLAND.

INSPECTOR'S REPORT.

SIR,— Education Office, Hokitika, 31st January, 1898.

In reply to your request, I have the honour to report on the working during 1897 of the carpentry class connected with Kumara School. The following statement was attached to the examination report made in November: Attached to the school is a class for manual instruction under the direction of Mr. G. A. Bell. There are thirty-five pupils attending, and the class has been in existence for five months. The pupils are arranged in three divisions, but there is no attempt as yet to classify according to ability. Some of the pupils are taken from classes as low as the Second Standard, and thirteen pupils have not reached the age of twelve years, the age of several being only nine. While most of the work is satisfactory, it must be remembered that in the future, when each year new classes are formed, and pupils are engaged at different stages, the work of the instructor will be greatly increased, and on this account it is inadvisable to include young pupils, who will later have an opportunity to secure the benefits of the institution. The class is conducted in a suitable building erected for the purpose, and timber has been supplied by the voluntary contribution of residents.

The course followed by the class is that adopted by the Education Department in a series of diagrams. The curriculum is strictly adhered to, and the results are satisfactory. A statement of accounts is enclosed. Of the grant of £70 received from the Minister of Education for the erection of the workshop, £68 6s. 6d. has been expended, and the painting of the building remains to be done.

I have, &c.

The Secretary, Education Department, Wellington. A. J. MORTON, Inspector.

STATEMENT of ACCOUNTS for the Half-year ending 31st December, 1897.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Fees received from students .. | 7 | 12 | 0 | Salary of instructor (at 2s. 6d. per hour) .. | 11 | 10 | 0 |
| Capitation from Education Department .. | 5 | 16 | 10 | Miscellaneous .. .. .. .. | 0 | 6 | 0 |
| | | | | Balance .. .. .. .. .. | 1 | 12 | 10 |
| | £13 | 8 | 10 | | £13 | 8 | 10 |

## CANTERBURY SCHOOL OF ART.

### ART MASTER'S REPORT.

[Extract from the Annual Report of the Canterbury College.]

The Art Master reported on the work for the year 1897, as follows:—

"Owing to the necessity having arisen for economy, alterations have had to be made, including the raising materially of the fees in both morning and evening classes. The school has thus been severely handicapped, and the numbers necessarily have been somewhat less than in the previous year. Notwithstanding this slight decrease, however, the work in all the different branches has been very satisfactory. The numbers for the three terms compared with 1896 have been respectively as follows: Morning: 1896—38, 34, 37; 1897—32, 29, 31. Evening: 1896: 98, 98, 104; 1897—101, 89, 93. Saturday: 1896—77, 100, 106; 1897—97, 88, 93. In the morning class for drawing and painting the work, as in former years, has been divided into four branches—one elementary, two intermediate, and advanced. In the first, outline and elementary light and shade have been studied from models, still life, and the cast; in the two intermediate ones more difficult work, combined with colour, has been given; and in the advanced the students have drawn from the cast of the full figure and painted from life and still life. We have been hindered very much in our still-life work by the want of suitable objects from which to study, and I trust we shall be able to obtain a better supply of more appropriate ones this year. Those qualified have painted landscape from nature each Tuesday when the weather permitted. The class was rather larger and the average attendance a little higher than in the previous year. In the evening class all the students at the commencement of their studies, to whatever branch of work they wish ultimately to devote their attention, are thoroughly grounded in freehand and model, and no special certificate of any kind is granted until the student has obtained certificates in these subjects; hence these foundation classes are always two of the largest. In the freehand work, the brush has been freely used as well as the pencil with which to line-in or finish a drawing. As greater care and delicacy of handling is required when using this method, it gives increased power of manipulation, and is extremely useful in preparation for future work. The memory has been again trained by special work both at school and at home, and its usefulness is now more manifest in the advanced work. Modelling in clay and plaster-casting have been taught on Monday night from 7 to 9, and on Wednesday morning from 11.30 to 1. The last term the number attending was—morning 10, evening 21. The work has been very satisfactory, and the quality and quantity have both made marked progress. From being one of the most insignificant this class has developed into one of the most successful in the school. As yet the work has been, with one exception, of an elementary character, most of the students copying from elementary casts of ornament and the antique, and a few from drawings and photographs. Two have modelled heads from the antique, and one has done several bas-reliefs from life. A new feature in the last year's work has been the moulding and casting, and very successful results have been achieved, considering the short experience of the students. Chip-, gelatine-, and piece-moulding have all been practised. B. Garsia, G. Hart, E. Archbold, and C. Brassington have produced the best and most advanced work. Classes for drawing and painting from life have been held. The numbers attending for the last term were as follows: Draped—morning 13, evening 8; nude—morning 6, evening 8. At the beginning of last term a ladies' class for drawing from the full figure was started, and nine students attended. This class was established by the Board at the request of the lady students, and will, doubtless, prove a great help to their progress, as nothing can equal study from the figure for learning form and proportion. The work from the life surpasses anything yet produced, especially that from the nude, of which there is a splendid series of drawings and sketches in the annual exhibition, showing the very marked progress of the students. Classes in wood-carving and sloyd have been held, for the former on Friday from 3 to 5 p.m., and on Saturday from 10 to 11.30 a.m., and for sloyd on Saturday from 11.30 a.m. to 1 p.m. The attendance for the last term was six in each class. Compared with that of last year this is somewhat disappointing considering the educational value of sloyd work. The work for the most part consisted of chip-carving and the construction of models in cardboard. The few who attended produced some creditable work, especially in the carving. Classes in geometry and perspective (elementary and advanced) have been held. The attendance has been about the same as the two previous years, but the results of the work, as shown by the examinations, have much improved, especially in elementary geometry. The teachers under the North Canterbury Board of Education have attended on Saturday mornings from 9.30 to 12.30, and have been taught freehand, model, geometry, perspective, elementary light and shade, and memory-drawing on the blackboard. The same number as in the previous year completed their full second-grade certificates—viz., Sydney Taylor and Robert S. Pearson. Classes in architecture and decorative design have been held on Thursday and Friday evenings, from 7 to 9, under the direction of Mr. Hurst-Seager. The last term the attendance was—Decorative design, 25; architecture, 12. The lectures, illustrated by limelight views of the best examples of all periods, were well attended throughout the year, and the home- and class-work based on the principles learnt were very creditable. A loan collection of studies from South Kensington was shown for three weeks last September, and was exceedingly

useful in showing what standard our students would have to strive for in the various branches of art work. Our thanks are due to the Education Department for obtaining these works. It is very desirable that we should have a set on permanent exhibition, and I hope we may succeed in obtaining one this year; for a temporary loan, though useful, is not sufficient.

"The work at the Boys' High School has been similar to last year, except that the attendance has been larger. Model-drawing has been taught to a junior division on Monday from 3.20 to 4, and a senior one on Thursday for the same period.

"The six free studentships offered by the Board for the annual competition on the past year's work were won by the following students:—Morning class: Landscape painting from nature, R. Procter and E. Turner, equal; painting from life, R. Procter (this student also gets the medal given in this subject); painting from still life, M. H. Aitken, M. Fuller, and E. Turner, equal. Evening students: Drawing from life in monochrome, A. E. Abbott, A. L. Ford, and A. E. Maling, equal; drawing from the antique in monochrome, L. H. Booth; architecture, G. Hart. Prizes: Modelling in clay (Whitcombe and Tombs), E. Archbold and G. Hart, equal; painting from still life (head master's), E. Simpson. Arrangements have now been completed for the competition in connection with the scholarships offered by the Canterbury Industrial Association. Four are to be offered in one year and three the next (alternately). The value of each scholarship will be £5 (or £2 10s. per annum, this sum being the yearly fee for three nights per week). Apprentices connected with trades in any way associated with art will be eligible to compete, and an examination will shortly be held at the school to select the first holders. I am glad that the interdependence and well-being of the school with the industries of the district is being recognised in this way by such a body as the Industrial Association, and I trust that it will be an incentive to, and a beginning of a closer interest in the work of the school on the part of these societies and individuals whose work is partly our work—viz., the furthering and developing of our industries.

"The annual local examinations were held last December, with the following results:—Second grade: Freehand 60, model 51; geometry, 23; perspective, 14; blackboard, 12. Full second-grade certificates, 10. Modelling in clay from the cast (elementary stage)—first-class, 9; good, 3; pass, 3. Advanced stage from drawing or photographs, three passes. Wood-carving and sloyd, two passes in each. The first examinations in connection with the South Kensington Science and Art Department were held last July. The results are appended, and on the whole are exceedingly creditable. The average of passes was 76·6 per cent., the total number of entries being 128 in all subjects, and thirty failures. Some of the best works done during the year we shall send to London to compete in the national competition which takes place in May. The annual exhibition of students' work done during the past year is now being held, and it must be conceded that for quality and quantity it has never been excelled. Similarly to last year the life and still-life work and modelling in clay show out remarkably well, the new features especially noticeable being the casting in plaster and the large series of drawings from the full figure. We have to thank Messrs. Mountfort and Gibb for kindly acting as judges and examiners again. The former examined in architecture, perspective and decorative design, and the latter in drawing and painting.

"At the end of the first term, Miss Munnings, after serving the Board well for six years, severed her connection. Praise is due to her for the efficient way in which she has always discharged her duties, and her loss has been appreciably felt. Misses H. L. Gibson and H. L. Smith, two students, have been appointed in her place, and have so far given every satisfaction. I cannot speak too highly of the earnest work and help rendered by my staff, to whom the success of the year's work is largely due.

"The results of the annual competition were as under: Free studentships, morning students: Painting landscape from nature—Emily Turner and Robert Procter, equal; G. Bell, A. McLean, A. M. Nurse, hon. mention. Painting from life in colour—Robert Procter. Free studentship and medal—M. H. Aitken and M. Fuller, hon. mention. Painting from still-life in colour—M. H. Aitken, Mary Fuller and Emily Turner, equal; A. McLean and R. Procter, hon. mention. Evening students: Drawing from life in monochrome—A. E. Abbot, A. L. Ford, and A. E. Maling, equal; C. Packer, hon. mention. Drawing from the antique in monochrome—L. H. Booth and A. L. Ford, hon. mention. Architecture—G. Hart. Prizes: Painting from still life in colour—E. Simpson; Modelling in clay—E. Archbold and G. Hart, equal.

"*Examinations.*—Art-class teacher's certificate, section 5, sheet and elementary design, first-class pass—A. E. Abbott, A. L. Ford, B. Hall, L. Lezard, A. M. Nurse, C. Packer, E. Thompson; second-class pass, A. Peppler. Number of candidates, 8; failures, none.

"The results of the South Kensington examinations, held in July, 1897, were as follows:—Elementary freehand: Passes, first class, 26; second class, 7; total candidates, 41; failed, 8. Elementary model-drawing: Passes, first-class, 2; second class, 23; total candidates, 38; failed, 13. Advanced freehand drawing, outline from the cast: Passes, first class, 4; second class, 1; total candidates, 5; no failures. Advanced model, light and shade from models: Passes, first class, 3; second class, 1; total candidates, 4; no failures. Elementary light and shade from the cast: Passes, first class, 9; total candidates, 9; no failures. Advanced light and shade from the cast: Results not to hand. Drawing from the antique: Passes, first class, 1; second class, 1; total candidates, 3; failed, 1. Painting from still life: Passes, first class, 1; second class, 4; total candidates, 8; failed, 3. Drawing from life: Passes, first class, 1; second class, 1; total candidates, 2. Elementary geometry: Passes, 2; total candidates, 7; failed, 5. Elementary perspective: Passes, first class, 4; second class, 4; total candidates, 11; failed, 3.—G. H. Elliott, Art Master."

## MANUAL-TRAINING CLASS, NORMAL SCHOOL, CHRISTCHURCH.

### INSTRUCTOR'S REPORT.

SIR,— Normal School, 4th January, 1898.

I have the honour to report on the manual-training classes for the nine months ending the 31st December, 1897, as follows :—

The first quarter commenced on the 3rd April, and was attended by seventy-two masters, students, and pupil-teachers, and 130 boys, formed into ten classes, seven of which were held in the afternoons, one in the morning, and two in the evening to suit masters, pupil-teachers, and students at the Normal School. The second quarter commenced on the 12th July, and was attended by fifty-seven masters, &c., and 150 boys, formed into eleven classes, two of which were held in the evening. The third quarter commenced on the 4th October, and was attended by 125 boys and thirty teachers, formed into nine classes. During this quarter the Normal students did not attend. A fee of 2s. 6d. for boys and 5s. for masters has been charged. This keeps away a great many who would attend if it were free, but at the same time it improves the class of boys who come, by weeding out a number of those who have no liking or aptitude for the work.

Taking the work as a whole, it has been very satisfactory. The drawing of the boys is much better than I expected to find it, and the whole of the classes have shown great aptitude with the tools. I have kept specimens of the work done for your reference, and for future comparison. The discipline has been excellent, and reflects very favourably on the training given at our schools. I am much indebted to the masters for their selection of boys as sent to the classes.

A number of teachers have made application to take the first-year examination under the London and City Guilds examiners, which is to be held in June next. The work done by the teachers is very good; in many cases it is excellent. This is to be expected from men who give a whole day and travel (as many do) thirty or forty miles for two hours' instruction.

I am indebted to the department in Wellington for a number of specimens of New Zealand timber, also to several of the masters—viz., Messrs. Cookson, Withell, Watson, and Sydney Smith—for specimens of colonial and foreign woods.

I trust that in the near future Fifth Standard boys will be admitted, as boys from the Seventh Standard do not stay long enough to reap much benefit, many of them leaving to go to work.

I have, &c.,

The Chairman, Normal School Committee. F. W. SANDFORD, Instructor.

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The following table shows the number of teachers and boys that attended at the Normal School, with the number of classes held during each quarter :—

| Quarter commencing | Number of Classes. | Roll-number. | | Total Roll-number. |
|---|---|---|---|---|
| | | Teachers. | Boys. | |
| 3rd April ... ... ... | 10 | 72 | 130 | 202 |
| 12th July ... ... ... | 11 | 57 | 150 | 207 |
| 4th October ... ... ... | 9 | 30 | 125 | 155 |

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BALANCE-SHEET for the Year ending December, 1897.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| To Government grant for fitting up workshop .. .. .. .. | 172 | 10 | 0 | By Instructor's salary .. .. .. | 78 | 10 | 0 |
| Fees .. .. .. .. | 79 | 17 | 6 | Fitting up room .. .. .. | 69 | 1 | 6 |
| Capitation grant from Government .. | 41 | 7 | 6 | Tools .. .. .. .. | 85 | 0 | 6 |
| | | | | Lathe .. .. .. .. | 16 | 10 | 0 |
| | | | | Timber for use in school .. .. | 14 | 0 | 8 |
| | | | | Gas .. .. .. .. .. | 8 | 5 | 0 |
| | | | | Stationery, &c. .. .. .. | 9 | 6 | 8 |
| | | | | Balance .. .. .. .. | 13 | 0 | 8 |
| | £293 | 15 | 0 | | £293 | 15 | 0 |

Fees charged per term: Masters, 5s.; school-children, 2s. 6d.

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## MANUAL-TRAINING CLASS, LEESTON.

### INSTRUCTOR'S REPORT.

SIR,— Normal School, 4th January, 1898.

I have the honour to report on the Leeston manual-training class, held on Saturday evenings, for the past quarter, ending 18th December, 1897 :—

I held ten classes on separate nights, each lesson being of three hours' duration, from 6.30 to 9.30 p.m. The class is mainly composed of masters in the district schools surrounding the Leeston School, several of whom have to travel several miles. Considering the distances I think the attendance is very satisfactory. The work is above the average of any other class which I instruct. This is, I think, due to the fact that the pupils are enthusiasts, and do a great deal of "home-work"; this enables them to show good results at class. I expect good results from this class at the forthcoming examination.

I have, &c.,

The Secretary, Board of Education, Christchurch. F. W. SANDFORD, Instructor.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Public subscriptions .. .. .. | 14 | 5 | 0 | Benches .. .. .. .. .. | 7 | 13 | 0 |
| Advance by members of class .. .. | 9 | 0 | 0 | Tools .. .. .. .. .. | 8 | 2 | 5 |
| Grant in aid (Government) .. .. .. | 25 | 0 | 0 | Refund to instructor (train-fare) .. .. | 2 | 10 | 0 |
| Train-fare for instructor .. .. .. | 2 | 10 | 0 | Fees to instructor .. .. .. .. | 8 | 5 | 0 |
| Capitation grant .. .. .. .. | 1 | 6 | 3 | Refund advance by members .. .. | 9 | 0 | 0 |
| | | | | Balance .. .. .. .. .. | 16 | 10 | 10 |
| | £52 | 1 | 3 | | £52 | 1 | 3 |

## CHRISTCHURCH SCHOOL OF DOMESTIC INSTRUCTION.

### REPORT FOR THE YEAR 1897.

OUR annual report for the year 1896 was written with a somewhat gloomy outlook. The school had, indeed, so far had a fairly prosperous existence, with its finances secured by a pound-for-pound subsidy out of the public funds on friendly contributions and class-fees. There was a good and increasing attendance of pupils of all classes, and the public seemed to appreciate the work that was done; but the Act for the promotion of technical instruction, which had recently come into force, superseding the earlier arrangements, said nothing of subsidies on voluntary efforts, and substituted such meagre financial provisions that our school, and others of a similar technical character in the colony, were threatened with disaster. We were like to be killed by mistaken kindness, though not, certainly, by way of surfeit. Happily, however, those in authority recognised the realities of the position ere it was too late, and means were found at the close of the year by which a special grant was made to the bodies concerned, and to our school among the number. Our share of the special grant was £80, and this sum, with £40 balance in hand, enabled us to begin the new year with brighter prospects.

The year just passed has, we are happy to say, been the best we have yet had. The number of pupils quarter by quarter has been more than well maintained, and the amount derived from fees has largely exceeded previous receipts.

The following are the returns for the four quarters, giving the number of classes conducted (cookery, dressmaking, and laundry-work), the total number of pupils attending them, the average attendance, and the amount of capitation claimed.

| | Jan.–March. | April–June. | July–Sept. | Oct.–Dec. |
|---|---|---|---|---|
| Number of classes ... ... | 13 | 11 | 11 | 12 |
| Number of pupils ... ... | 150 | 135 | 151 | 138 |
| Average attendance ... ... | 125·5 | 102·7 | 126·8 | 117·4 |
| Amount of capitation ... ... | £15 13s. 9d. | £12 16s. 9d. | £15 17s. | £14 13s. 6d. |

During the year cooking classes were opened at Ashburton at the instance of local residents, and arrangements were made by which one or more of our teachers went down there on Saturdays to conduct them. Later on, the Ashburton people wished us to arrange for a Friday evening class as well, but the arrangement could not readily be made, and during the past quarter only one Saturday class at Ashburton has been conducted.

The new Technical Education Bill, which is now before the House of Representatives, and which is intended to supersede "The Manual and Technical Instruction Act, 1895," the Act to which reference has already been made, is a greatly improved measure. In its financial provisions as affecting ourselves it increases the capitation grant by two-fifths, and further embodies the principle of a pound-for-pound subsidy on private contributions and on donations from local public bodies, empowering the latter, whatever the ordinary purposes of their existence may be, to make such donations. If the Bill becomes law we shall still have to depend on the generosity of friends to assist us by their subscriptions, and with the encouragement given we have no doubt they will continue to do so. As may be seen by a glance at our honorary treasurer's statement, we shall begin the coming year with a balance to credit of £71, and, taking into account all sources of income, we may entertain a reasonable confidence that a pretty satisfactory basis for a permanent existence is now assured, provided only that the instruction afforded continues to be equally acceptable to those for whose benefit it is intended.

One important item of expenditure is the annual rent for the rooms occupied. This item, we think, should ere long disappear, and we trust that means will presently be found of providing a suitable building, in which the branches of practical domestic economy may find a home side by side with other branches of technical education. We are glad to see that the Government of the day is alive to the requirements of the colony in this respect. Meanwhile, pending further developments, we commend the needs of Christchurch to our friends the members of the Industrial Association, through whom, it seems to us, a movement in the desired direction could best be made.

The classes in cookery have just been examined for prizes, &c., by Mrs. R. D. Harman, a *diplomée* of the South Kensington School of Cookery, whose very satisfactory report is appended. As the result of the special certificate examination held at the same time, one pupil receives a certificate in advanced cooking, and five in plain cooking.

CHARLOTTE W. TURRELL, Vice-President.

Christchurch, 10th December, 1897.

BALANCE-SHEET for Year ending 7th December, 1897.

| *Receipts.* | £ s. d. | *Expenditure.* | £ s. d. | £ s. d. |
|---|---|---|---|---|
| To Balance from 1896 .. .. .. | 40 8 6 | By Salaries .. .. .. | | 147 4 11 |
| Subscriptions and donations— | | Cooking materials, cost .. | 122 14 9 | |
| From Government, special .. .. | 80 0 0 | Less for sales .. .. | 66 8 9 | |
| From Government, subsidy on attendance .. .. .. .. | 84 8 7 | General expenses — Rent, gas, advertising, coals, and sundries .. .. .. | | 56 6 0 |
| From subscribers (Christchurch) .. | 30 10 0 | | | 138 16 10 |
| School-fees .. .. .. .. | 204 2 3 | Preliminary expenses—Cost of utensils, &c. .. .. .. | | 26 6 11 |
| Sundry receipts .. .. .. | 9 8 6 | Petty cash .. .. .. | | 8 17 1 |
| | | Balance .. .. .. .. | | 71 6 1 |
| | £448 17 10 | | | £448 17 10 |

Christchurch, 7th December, 1897. W. CHRYSTALL, Hon. Treasurer.

EXAMINER'S REPORT.

Mrs. Harman reports that she held the annual examination of the cookery classes at the School of Domestic Instruction, and was greatly pleased with the result. There were in all four classes for examination—two for certificates and two for prizes. The work was excellent, the rules and principles of the various methods tested being thoroughly understood, every attention being paid to neatness as well. The candidates for certificates especially acquitted themselves in a highly satisfactory manner, which proved the thoroughness of the training received at the school. The number of those going in for certificates showed the good work the school is doing, and also the high estimation in which it is held as a training-school for domestic work.

SCALE OF FEES PER QUARTER.

*Cooking.*—School-children, domestic servants, and girls in business, 5s.; school-teachers, 7s. 6d.; other persons, 10s. 6d.; advanced classes, 10s. 6d.; high class, special classes, £1 1s. Materials provided by the school. Dishes cooked may be purchased by the pupils.

*Dressmaking.*—School-children, domestic servants, and girls in business, 5s.; other persons, 10s. 6d.

*Ironing and Clear-starching.*—School-children, domestic servants, and girls in business, 5s.; other persons, 10s. 6d.

YOUNG MEN'S CHRISTIAN ASSOCIATION'S CLASSES, CHRISTCHURCH.

MANAGER'S REPORT.

THE Board of Management of this association have held shorthand and other educational classes, open to members and non-members, since the opening of the present fine building in Cambridge Terrace in 1884. Special efforts were made in 1896 by the then president, and classes in mathematics, literature, chemistry, drawing, elocution, and shorthand were commenced under competent instructors. All these did good and useful work.

In 1897 the only classes formed under the Technical Instruction Act were in book-keeping and shorthand. The book-keeping classes were under the guidance of Mr. F. W. Tregear, accountant at Messrs. Strange and Co., of this city, a thoroughly well qualified master, and the pupils attained considerable proficiency under him.

The class in shorthand, which commenced early in April and continued throughout the year, was conducted by Mr. J. M. Telford. During the two terms ending the 30th September the classes were the largest ever held by the society. Elementary, corresponding, and reporting classes were formed, and very rapid progress was made in the three divisions. In October seven pupils in the intermediate class sat for examination for the Pitman second-class or theory certificate. Of these six received certificates from Sir Isaac Pitman and Sons. During the spring term ending the 23rd December the attendance fell off, although still greater than in the corresponding term of any previous year.

The association find these classes in rooms, gas, and firing, and go to considerable trouble in making the classes known in the city. The classes are not confined to members of the association, but are more largely attended by outsiders, and last year we remitted the fees in cases outside our own membership where it appeared to the Board that instruction would be useful but could not otherwise be obtained.

A. W. BEAVEN.

BOYS' GORDON HALL, CHRISTCHURCH.

MANAGER'S REPORT.

A CLASS in shorthand was instituted by the Committee of Management at the beginning of April, and work was commenced in a room kindly granted by Rev. A. W. Averill, M.A., vicar of St. Michael's Church. The class met once a week for one hour. Twenty-eight boys were enrolled, but, as was to be expected—these boys not being accustomed to regular mental work—many gave it up in early part of term. The boys who remained made good progress, and were through the elementary stage at the end of term. All joined for another term early in July, but before the end several boys had to leave owing to changes in their daily occupations, others grew tired when the novelty wore off, so that the class collapsed just before the end of the second term.

## DUNEDIN SCHOOL OF ART AND DESIGN.

### Director's Report.

Sir,—

I have the honour to submit my report on the School of Art and Design for the year 1897:—

The total number of students who attended the school during the past season was 409, showing an increase of fifteen as compared with the previous year. This total includes 103 teachers and pupil-teachers, thirty-five students in training, 114 students who attended the day classes, and 157 students who attended the evening classes.

During the session the painting class was discontinued. I regret this, as it materially reduced the number of students; but it is a great satisfaction to be able to state that those who remained under the altered circumstances made excellent progress in advanced drawing from groups, the antique figure, the living model, practical plane and solid geometry, and perspective. Owing to the discontinuance of painting I was enabled to resume the teaching of modelling. With the above exceptions the courses of instruction have been the same as in former years. A student of this school, E. Crow, was appointed art pupil-teacher. During the Otago Art Society's Exhibition the students were invited to visit the exhibition gratuitously. About two hundred availed themselves of the invitation. The loan collection of students' works from the Science and Art Department, South Kensington, was exhibited in the school from the 18th October to the 10th November, and this opportunity of studying works of sterling merit was largely taken advantage of by the students and general public, who evinced great interest in the exhibition.

The teachers, students in training, and pupil-teachers' classes maintained their numbers and made satisfactory progress. At the December examinations only the first-class pupil-teachers were examined, the result being as follows: Perspective—Number examined, 27; excellent, 5; good, 11; fair, 9; failed, 2.

During the University term, students from the School of Mines met four times every week. The courses of instruction were: First year students, model-drawing and practical geometry; second year students, solid geometry and machine-drawing. The result of their examination is as follows:—Model-drawing: Examined, 25—first class, 8; second, 9; passed, 6; failed, 2. Practical geometry: Examined, 25—first class, 15; second, 6; passed, 2; failed, 2. Solid geometry: Examined, 12—first class, 1; second, 4; passed, 5; failed, 2. Machine-drawing: Examined, 12—first class, 4; second, 3; passed, 3; failed, 2.

The science classes for practical plane and solid geometry, building construction, and machine drawing have maintained their average attendance of the previous year. The results of the South Kensington examinations, however, show a great improvement, and prove that students are becoming more alive to the value of the study of these subjects. The evening art classes continue to be well attended. The work of the different classes also shows a decided improvement. The following are the results of the London Science and Art Department's examinations:—

*Science Subjects.*—Practical plane and solid geometry (elementary stage)—Examined, 16: passed, 9; fair, 6; failed, 1. Building construction (elementary stage)—Examined, 9: passed, 6; fair, 2; failed, 1. Building construction (advanced stage)—Examined, 2: first class 1; second class, 1. Machine-drawing (elementary stage)—Examined, 6: passed, 5; failed, 1. Machine-drawing (advanced stage)—Examined, 1: first class, 1. Included in the above are five external students (four geometrical and one machine-drawing.)

*Art Subjects.*—Geometrical drawing (elementary stage)—Examined, 22: passed, 20; failed, 2. Perspective drawing (elementary stage)—Examined, 1: second class, 1. Freehand drawing (elementary stage)—Examined, 78: first class, 25; second, 26; failed, 27. Model-drawing (elementary stage)—Examined, 56: first class, 11; second, 30; failed, 15. Drawing in light and shade (elementary stage)—Examined, 32: first class, 9; second, 15; failed, 8. Principles of ornament—Examined, 1: first class, 1. Freehand drawing (advanced stage)—Examined, 19: first class, 13; second, 6. Model-drawing (advanced stage)—Examined, 12: first class, 8; second, 4. Drawing in light and shade (advanced stage)—Examined, 16: excellent, 2; first class, 11; second, 3. Drawing from the antique (the figure)—Examined, 2: second class, 2.

The following students have fulfilled all the requirements for the elementary drawing certificate: Elsie Napier Bell, Nellie L. D. Hutton, Henrietta Mackay, Margaret Ewing, T. M. Clark, W. J. Hutton, Walter Beeson. The annual exhibition of students' work was held at the close of the session and was largely attended.

I have, &c.,

The Secretary, Otago Education Board. David C. Hutton.

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The following list shows the occupations of the students who attended the evening classes: Boilermaker, 1; blacksmith, 1; bookbinder, 1; baker, 1; bootmaker, 1; brushmaker, 1; cabinetmakers, 4; carpenters, 23; clerks, 6; clicker, 1; coachbuilder, 1; cook, 1; compositor, 1; drapers, 5; dentist, 1; dressmakers, 7; embosser, 1; engineers, 25; fitters, 4; iron-turner, 1; joiners, 3; lithographers, 2; mining engineers, 6; moulder, 1; photographic artist, 1; painters, 8; patternmaker, 1; plumbers, 3; printer, 1; plasterer, 1; retouchers, 3; saleswoman, 1; seedsman, 1; students, 17; tailor, 1; traveller, 1; turner, 1; teachers, 3; tailoress, 1; no occupation, or home duties, 14.

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## DUNEDIN TECHNICAL CLASSES ASSOCIATION.

### Annual Report for 1897.

In presenting their ninth annual report of the Technical Classes Association, your Committee has to congratulate the members and subscribers on the important advance made during the past year.

The association has now secured suitable premises on a tenure which justifies the expenditure of money in the way of fitting them up so as to meet the wants of the classes for some years to come. In order to enable it to enter into binding arrangements, your Committee took the necessary steps in June last to have the association incorporated under the provisions of "The Religious, Charitable, and Education Trusts Board Incorporation Act, 1884."

A sub-committee was appointed to wait upon the trustees of the Kaitangata Relief Fund and ascertain on what terms the building we now occupy could be secured. The result of these negotiations is that the premises have been leased for a period of five years at a rental of £80 per annum, with the option of purchasing the freehold and all the buildings on it at the close or during the currency of the lease for the sum of £2,500. To assist in this desirable object, the Otago Education Board generously undertook to contribute the sum of £75 per annum for five years. As very considerable alterations had to be made to adapt the building to the requirements of a technical school, the Committee, in September last, called for tenders for this work, and accepted the lowest, which was that of Messrs. Torrance and Simpson, for £605. The work has been completed to the entire satisfaction of the Committee. There still remains to be done the work of furnishing the rooms for teaching purposes, and it is estimated that this will require a further expenditure of £500. Owing to these heavy demands on its funds, the Committee has not yet been able to fit up the electrical laboratory, as was originally intended; the work must therefore stand over for the present.

A considerable amount of correspondence has been carried on during the year with other technical associations in the colony, with the view of conjointly bringing before the Government the need which exists for an increased rate of subsidy. The new Technical Education Bill introduced by the Premier towards the close of the parliamentary session led to the hope that these recommendations would be given effect to, but the subsequent withdrawal of the Bill leaves matters where they were. So inadequate is the provision granted under present arrangements that associations in a less stable position than our own find it almost impossible to resume operations at the present time. On the 23rd June the members of the Committee, together with Messrs. M. J. S. Mackenzie and J. A. Millar, M.H.R.s, waited upon the Hon. Mr. Walker, Minister for Education, during his visit to Dunedin, to urge the claims of the association for a special grant in aid of their new school. The deputation was very cordially received, and the Minister undertook to forward the views of the deputation as far as possible, and try to get a sum of £1,000 placed on the estimates for the purpose. As a matter of fact, a very large sum was put on the estimates for the purpose of aiding technical schools, but, as the vote was conditional on the passing of the Bill referred to, and as the Bill was withdrawn, your Committee is not aware whether any special sum was voted at all.

During the past session—as the report of the honorary secretary (read at the closing meeting on the 15th October) shows—classes were held in twenty subjects, and the number of students enrolled was 701, a great increase on all preceding years. Of these, seven applied for and obtained either partial or complete remission of their fees. Two students gained the senior diploma of the association, six the junior, and 170 obtained certificates qualifying for diplomas in various subjects.

The balance-sheet shows that the total receipts for the year, including a balance from last year of £422 1s. 7d., amount to £1,322 4s., and the expenditure to £1,190 1s. 6d., leaving a balance to the credit of the association of £132 2s. 6d. In addition to this, there are outstanding liabilities amounting to about £300.

STATEMENT of RECEIPTS and EXPENDITURE for the Year ending 31st January, 1898.

| *Receipts.* | £ | s. | d. |
|---|---|---|---|
| To Balance, 31st January, 1897 | 422 | 1 | 7 |
| Class fees | 427 | 13 | 3 |
| Subscriptions | 70 | 13 | 0 |
| Hire of typewriters | 9 | 0 | 0 |
| Interest | 3 | 10 | 0 |
| Rent | 7 | 3 | 6 |
| Government subsidy | 382 | 2 | 8 |
| | £1,322 | 4 | 0 |

| *Expenditure.* | £ | s. | d. |
|---|---|---|---|
| By Salaries | 501 | 2 | 2 |
| Printing, stationery, and advertising | 42 | 2 | 8 |
| Rent, taxes, and insurance | 133 | 1 | 6 |
| Gas and coal | 25 | 18 | 1 |
| Incidental expenses | 8 | 18 | 11 |
| Materials for practical classes | 13 | 4 | 9 |
| Law-costs | 6 | 1 | 0 |
| Repairs | 9 | 12 | 5 |
| Alterations to premises | 450 | 0 | 0 |
| Balance— | | | |
| Bank of New Zealand, current account | 24 | 1 | 2 |
| Dunedin Savings-bank | 108 | 1 | 4 |
| | £1,322 | 4 | 0 |

Dunedin, 28th February, 1898.

Audited and found correct.
C. GRATER, Auditor.

SUPERINTENDENT'S REPORT FOR 1897.

In presenting my report of the work done during the session, which closed on the 30th September, I have to call attention in the first instance to the very large numbers who have taken advantage of the classes this year. The total number enrolled, which is irrespective of nearly forty more who joined classes which were not proceeded with, was 701. The great increase which this represents is best shown by giving the numbers enrolled each year since the commencement of the association's work: 1889, 288; 1890, 170; 1891, 318; 1892, 364; 1893, 390; 1894, 385; 1895, 457; 1896, 458; 1897, 701. If anything were needed to show how strong a hold this work has gained on the public it is supplied by these figures. It is no doubt true that no less than 566, or 80 per cent. of the total number enrolled, only enter for one of the classes on the syllabus; but even this means that these students give up considerable part of two evenings each week to improve their educational status.

The botany class opened on the 5th October, 1896, for the spring session, and on the 8th February, 1897, for the autumn session. In my last report I stated that it was intended to take up a class for advanced work in botany, and this was done by Mr. Tennant, nine students attending.

A special class was opened at the beginning of summer to prepare candidates for the technological examinations of the City and Guilds of London Institute in plumbing and carpentry, but was abandoned very soon after starting owing to the paucity of the attendance.

The regular winter session was opened on the 5th April, with twenty-one classes, and closed on the 30th September, there being a fortnight's recess in the middle. New classes for painters' and decorators' art and photography were projected, and one for German resuscitated. For painters' art the Committee were fortunate in securing a most competent instructor in Mr. R. F. Smith, who gave his services gratuitously. I have reason to believe, from conversation with men who know the trade thoroughly, that instruction in its technique is much needed by boys and improvers. Yet the number who entered was so discouragingly small that the class was dropped. Similarly, and from the same cause, the attempt to establish a German class was abandoned.

For photography between thirty and forty persons enrolled, and more were prepared to come forward. In this case our difficulty arose from the opposite cause—that, namely, of obtaining a teacher. Mr. W. Williams, president of the Dunedin Photographic Society, was provisionally induced to undertake the tuition of this class, but he could not obtain the necessary permission from the Government department to which he belongs, and it was not found possible to secure any one else at the short notice.

The English literature class was carried on for the first quarter by Miss Marion S. White, and was well attended, the greatest interest being taken by the pupils in the subject, owing largely to its able presentation. The sad death of this very talented and promising young lady broke the course of work undertaken by the class. The Appointments Committee was fortunately able to secure the services of Miss Rose M. Davey, M.A., who at once addressed herself to the task of sustaining the high standard previously reached, and was very successful in her endeavour. The break, however, caused a very serious falling-off in the attendance, as such interruptions invariably do. The number enrolled for the English class was so large that I had to ask Mr. Eudey to subdivide them into two sections, he retaining the most advanced pupils, while Mr. T. R. Coutts, M.A., was appointed to the junior division. The arrangement was eminently satisfactory.

In connection with the Latin class, I have regretfully to report that Mr. E. A. Phillips, who has carried on this branch of our work since 1891, died after a short illness on the very day on which he had arranged to hold his closing examination.

Mr. William Gray, having been selected at the commencement of the session for the position of vice-principal of the Training College, found himself unable to resume the teaching of the arithmetic class, and Mr. J. R. Rutherford, M.A., undertook the duty at very short notice, and carried it on very successfully. Such changes are more or less inevitable in the work of an association like ours, and would, no doubt, be lessened were the classes under the direct control of the Education Board. But they militate against the success of the work, as the teachers who are appointed have no time for preliminary arrangement of their course of study.

One of the most popular and successful classes this year was one newly established for penmanship, which was conducted by Mr. J. Park Smith. The work done and the improvement shown by those who attended was extremely satisfactory, and at the suggestion of Mr. Cohen, who examined the class, it was resolved to award certificates to a number of candidates who presented themselves for examination. These certificates cannot, under our present rules, count for the diploma of the association, but they will be useful to those who have gained them as evidence of their success in improving their handwriting.

The association suffered a great loss in the departure for Oamaru of Dr. Don, who had conducted the chemistry classes since 1889 with such marked ability and vigour. Fortunately one of his own students, Mr. J. W. Mellor, whose scientific training began in these classes in 1891, and who last year gained from the University of New Zealand his degree of B.Sc. with first-class honours in chemistry, was able to step into the vacant place, and I have much pleasure in stating that his work has been carried out with conspicuous success. In addition to the regular class in elementary inorganic chemistry, a class in elementary organic chemistry was also formed, while several senior students carried on practical work in connection with their various trades.

The teaching of physics, which ought to be one of the strong points of a technical course, has suffered more than any other from change of teachers and want of a settled home. By shifting backwards and forwards to and from the Normal School the apparatus has been much deteriorated, and teachers find little satisfaction in undertaking the subject under such conditions. Mr. J. A. McNickle, who undertook the class under some pressure, has done the best he could under the circumstances, but has not been encouraged by the attendance. In our new premises special provision is being made for a lecture-room and separate laboratory for this important subject.

The dressmaking class this year was undertaken by Miss Kate Stewart, and was so largely attended that extra assistance had to be provided. I would like to call attention to the fact that the class "is especially meant for shop-girls, tailoresses, and other young women employed during the day-time, and is intended to teach them how to cut out and make their own dresses." Our classes in this, as in other subjects, are nowhere meant to enter into competition with any others already in existence, but to supply good tuition to those who cannot afford to pay the fees of private teachers.

I have not referred specially to the work done in the classes for French under Mr. Donald, mathematics under Mr. Marshall, bookkeeping under Mr. Grater, typewriting under Mr. Cope, shorthand under Messrs. J. Crosby Smith and H. Renfree, mechanical engineering under Messrs. Stevenson and Payne, plumbers' work under Messrs. Sherriff and Knox, carpentry and joinery

under Mr. D. Sherriff, and wood-carving under Miss Gether, because these have undergone no change from last year, except that their attendances have largely increased.

The cookery classes were this year carried on at the private residence of Mrs. Miller, in London Street, and were well attended. I hope, when our new class-rooms are opened, that the work done by the pupils who compete for the B and C certificates of the association will be thrown open to the public. If our young women, and especially our domestic servants, could see the excellent results which accrue from a course of study in these classes, they would hasten to avail themselves of them, and to qualify for the possession of these certificates. And if heads of households would take the trouble to satisfy themselves of the meaning and value of the certificates, they would soon insist on them as a *sine quâ non* in engaging a servant.

In connection with outside examinations, I have nothing to report about those for certificates for the South Kensington Science and Art Department, as entries were made to the local examinations conducted by the Education Board. In the examinations for the City and Guilds of London Institute, held in May last, nine students entered, viz.: In plumbing, four in the honours and one in the ordinary grade; and in mechanical engineering, four. None entered this year for carpentry and joinery. The reports of all the teachers as to the industry, zeal, and good behaviour of the pupils are unanimously good.

The association is again indebted to those ladies and gentlemen who undertook to act as examiners or assessors. It is always one of the most pleasing features in my report that I have to record so much assistance readily given by friends of the association to this work. In conclusion, I desire to express my thanks to the teaching staff for the pleasant readiness with which they have carried on their work, often under difficulty and disadvantageous circumstances. I trust that with the new session we shall not only enter into possession of new and suitable premises, but that the period of makeshifts through which we have struggled during the past nine years will have come to an end.

GEO. M. THOMSON, Hon. Secretary and Superintendent.

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## BALCLUTHA TECHNICAL CLASSES ASSOCIATION.

### ANNUAL REPORT AND BALANCE-SHEET, 1897.

THE Committee expended £9 14s. 5d. on new tools, and £15 19s. 2d. (nearly half of which was contributed by the Education Board) in extending the workshop.

The following classes were held: April–June quarter: Carpentry—Roll-number, 24; average, 21·2. Upholstery—Roll-number, 7; average, 5·5. Wood-carving—Roll-number, 8; average, 7·5. Book-keeping—Roll-number, 18; average, 14·8. Dressmaking—Roll-number, 6; average, 6. Shorthand—Roll-number, 14; average, 10·5. July–September quarter: Carpentry—Roll-number, 19; average, 18·5. Dressmaking—Roll-number, 8; average, 8. Shorthand—Roll-number, 10; average, 8·9. Classes were also held in gymnastics, ambulance, and nursing. Lectures were delivered by Alexander Bathgate, Esq., Rev. Dr. Waddell, and J. S. Tennent, Esq., M.A., and several concerts held.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| To Balance | 65 | 14 | 0 | By Teachers' allowances and class expenses | 49 | 12 | 9 |
| Class fees and members' subscriptions | 38 | 10 | 0 | Addition to workshop | 15 | 19 | 2 |
| Education Board subsidy | 7 | 10 | 0 | Carpenter's tools | 9 | 14 | 5 |
| Government subsidy | 15 | 14 | 3 | Printing and advertising | 8 | 2 | 6 |
| | | | | Apparatus | 2 | 10 | 0 |
| | | | | Sundries | 0 | 13 | 9 |
| | | | | Balance | 40 | 15 | 8 |
| | £127 | 8 | 3 | | £127 | 8 | 3 |

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## MANUAL-TRAINING CLASS, BALCLUTHA DISTRICT HIGH SCHOOL, OTAGO.

### SCHOOLMASTER'S REPORT.

CARPENTRY classes under Mr. Burley were held during the quarters ending June and September. For the former quarter the average attendance was twenty, for the latter 28·2. Owing to the number of pupils the classes were divided into sections, taken at different hours. The boys showed great earnestness in their work and pride in the result of their efforts, and credit is due to Mr. Burley for his zeal and energy. The boys provided their own material, and, as the Balclutha Technical Classes Association kindly gave the use of their workshop and tools, there was no outlay save the instructor's fees, which were met by the Government subsidy of £9 0s. 7d.

Receipts: To Government subsidy, £9 0s. 7d. Expenditure: By Instructor's fees, £9 0s. 7d.

W. MCELREA, Head-teacher.

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## MANUAL AND TECHNICAL CLASSES, TOKOMAIRIRO DISTRICT HIGH SCHOOL, OTAGO.

### COMMITTEE'S REPORT.

*Woodwork.*—During the second and third quarters of the year twenty-five boys were trained to the use of tools in the workshop, six of whom made boxes for themselves to hold clothes; six, writing-desks; two, book-cases; three, dressing-tables; one, a music canterbury; one, a chiffonier; one, an octagonal table; three, whatnots; one, desk with stand; and one, fretwork shelves. To make these articles the boys paid £10 5s. 10d. for material, and in addition a fee of 2s. 6d. per quarter to the janitor, Mr. Archer, for instruction, the articles made being their own property.

*Agricultural Chemistry.*—Thirteen boys of the advanced class, during the same two quarters, made quantitative analyses of two kinds of superphosphates, of Malden Island and Peruvian guano, and of two specimens of bone-meal. Examination was specially made for the determination of moisture, organic matter, phosphate of lime, carbonate of lime, sand, and insoluble matter.

Income: To Government subsidy, £9 16s. 11d.

Expenditure: By spirit-lamps, crucibles, patterns for workshop, 12s.; tools, £1 19s. 10d.; blowpipe, £1 18s.; chemicals, £5 7s. 6d: total, £9 17s. 4d. W. Moore.

## WAIWERA MANUAL AND TECHNICAL ASSOCIATION.

### Report, 1897.

In submitting a report of the above association for the year 1897 it may be stated that classes had been held for a short session during the previous year, and thus the way was prepared for work of a more extended and comprehensive nature. At a public meeting held on the 22nd May, 1897, this association was formed, and the Committee authorised to canvass the district and make all necessary arrangements for the carrying on of classes. Meeting with every encouragement, the following classes were ultimately started: Painting—twelve pupils; book-keeping—sixteen pupils; general education, English, and mathematics—eighteen pupils.

The classes met once a week, and with forty-six pupils on the roll the average attendance secured of 39⅓ is considered very satisfactory, seeing that many had to ride distances of from three to seven miles. The pupils, excepting some in the painting class, were all beyond school age, most of them having passed the public-school standards, but on leaving school had neglected further study. Realising, however, from experience the value of education, they were glad to avail themselves of the opportunity offered by the classes for improvement in that direction. The very regular attendance shows sufficiently the interest taken in the work. The well-posted books give evidence of evenings well spent at home, which, but for the classes, might have been spent in less profitable pursuits. This, together with the exemplary conduct of the pupils, greatly encouraged the instructors, and at a large public meeting held at the close of the session, not only the Committee, but all who saw them, were highly satisfied with the specimens of the work exhibited.

The Committee also arranged with Dr. Anderson, of Clinton, to deliver a course of ambulance lectures. These were delivered fortnightly to a class of forty-two members, and were very highly appreciated by all. A fee of 5s. was charged for each class, including the ambulance class. In cases where pupils attended two classes only a half-fee was charged for the second class. The session closed in September, excepting the painting class, which continued for a second quarter, ending on the 21st December, for which a fee of 10s. was charged. The thanks of the association are due to the School Committee, who willingly granted the use of both rooms of the school, providing firing, lighting, and cleaning, and making only a small charge, sufficient to cover the bare cost of the same.

21st March, 1898.

### Balance-sheet, 22nd May, 1897, to 10th March, 1898.

| *Receipts.* | £ | s. | d. | *Expenditure.* | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| To Class fees .. .. .. .. | 23 | 15 | 0 | By Allowances to instructors .. .. | 27 | 0 | 0 |
| Capitation .. .. .. .. | 11 | 6 | 4 | Rent of school .. .. .. .. | 1 | 15 | 0 |
| Contributions .. .. .. .. | 1 | 12 | 6 | Stationery .. .. .. .. | 0 | 5 | 0 |
| Books to classes .. .. .. | 3 | 15 | 9 | Sundry for classes .. .. .. | 0 | 4 | 4 |
| | | | | Books for classes .. .. .. | 3 | 18 | 8 |
| | | | | Balance .. .. .. .. | 7 | 6 | 7 |
| | £40 | 9 | 7 | | £40 | 9 | 7 |

Chas. Roseveare, Chairman.

21st March, 1898. M. G. Tait, Honorary Secretary and Treasurer.

## WAREPA TECHNICAL CLASSES ASSOCIATION.

### Report for 1897.

Toiro, Clutha, 22nd February, 1898.

The association was formed in May, 1897, for the purpose of providing for the youth of the district a means by which considerable improvement might be made in their education. The Committee records its gratification at the success of the undertaking, as about ninety names were enrolled for the different classes.

The following notes show the classes and a short report of the work done: Ambulance—This class was largely attended, and considerable interest shown in the work. The large amount of information gained will be of practical benefit to all concerned. Violin and organ—These classes have done as well as can be expected; they are now running their third quarter. Dressmaking (ten pupils)—The instructor reports as follows: "I have pleasure to report that the pupils attending the dressmaking class under my tuition made very satisfactory progress in the various branches of dressmaking during the term. They were all very attentive, and seemed to appreciate the opportunity afforded them of attending this class." Bookkeeping (fifteen pupils)—The instructor reports very favourably on the work done. He says, "The pupils showed considerable aptitude in their work"; and he was "considerably impressed by the perseverance of some of the pupils." The work done only included single-entry, which was considered the simplest and most useful to a farming community. Should the class go on next session it is intended to take up a particular

section entitled, "Farm Bookkeeping." Arithmetic (fifteen pupils)—The following work was done: Practice (simple and compound), elementary mensuration, and the easier cases of vulgar fractions. About half of the pupils did good work, two or three excellent, and the rest poorly. On the whole fairly good work was done, and gave promise of better in the future.

JOHN KILPATRICK, President.

| *Receipts.* | £. s. d. | *Expenditure.* | £. s. d. |
|---|---|---|---|
| To Class fees— | | By Salaries and class expenses .. .. | 38 16 0 |
| Ambulance .. .. .. .. | 5 0 0 | Printing, stationery, &c. .. .. | 6 14 0 |
| Music .. .. .. .. | 21 10 0 | Incidental expenses .. .. .. | 4 0 0 |
| Dressmaking .. .. .. .. | 6 10 0 | Firing, &c. .. .. .. .. | 2 5 0 |
| Bookkeeping .. .. .. .. | 2 17 6 | Balance .. .. .. .. | 1 6 1 |
| Arithmetic .. .. .. .. | 2 5 0 | | |
| Subscriptions, &c. .. .. .. | 7 0 2 | | |
| Government subsidy .. .. .. | 7 18 5 | | |
| | £53 1 1 | | £53 1 1 |

## SOUTHLAND TECHNICAL CLASSES ASSOCIATION.

### SECOND ANNUAL REPORT.

AT the annual meeting held on the 5th February last year the three retiring members of the governing body—viz., Messrs. Cuthbertson, Joyce, and Riddell—were re-elected to office for a further term of three years. Arrangements were at once made for commencing the work of the session. A special grant from the Government of £50 infused new enthusiasm into those interested in the cause, and the following syllabus of work was prepared: English, Latin, arithmetic, book-keeping, shorthand, wood-carving, plain and art needlework, dressmaking, practical plane and solid geometry and building construction, chemistry or physics, freehand and model drawing, carpentry, photography. Your Committee found that it was one thing to be "enthused" with the work themselves and another to instil that enthusiasm into the members of the community at large, and so, after every opportunity had been given to intending students to enrol for the various classes, it was found that only five of the classes out of the thirteen on the list had sufficient entries to justify their being proceeded with. These were English, arithmetic, book-keeping, dressmaking, and carpentry.

A pleasing feature of the session's work was the desire evinced by a number of young mechanics in the town to have a mechanical drawing class placed on the syllabus. This was agreed to, and the class proved one of the most successful of the session. For the purpose of securing to the fullest advantage the grants given by the Government to technical classes the session was divided into two terms of ten weeks each. The number enrolled and the average attendance in each class was as follows: English: First term—number, 9; average, 7; second term—number, 10; average, 8·10. Arithmetic: First term—number, 6; average, 5·7; second term—number, 5; average, 4·50. Book-keeping: First term—number, 11; average, 9·50; second term—not held. Dressmaking: First term—number, 14; average, 12·40; second term—number, 5; average, 4·90. Carpentry: First term—number, 20; average, 13·6; second term—number, 20; average, 17·90. Mechanical drawing: First term—number, 18; average, 14·70; second term—number, 16; average, 13·30. Last year the teachers were paid on the equal-dividend plan, this being agreed to by them so as to give the association a start. This year the principle was adopted of giving each teacher the sum of three guineas and a half for each term, with a bonus of 5s. per term for every student on the roll above the number of six. This system gave general satisfaction to all. At the time of last year's report the Government had under consideration the advisableness of further subsidising this association beyond that earned by way of capitation on the average attendance, with the result that a voucher for £50 was received shortly after the commencement of the year. This sum enabled your Committee to arrange teachers' salaries as above, and left the association, at the close of its year's work, with a credit balance of £32 5s. 3d. Hopes are indulged in that further assistance may be obtained for this year as well. That the Manual and Technical Instruction Act as it at present stands is abortive is generally admitted on all hands. Recognising this, the Government brought before the House last session a new Bill, which, as far as liberality in the matter of payment went, was a distinct advance on the present Act. Certain clauses in the scope of the Act were, however, thought by a majority of the House to be carrying matters rather too far, with the result that the Bill was killed, for the present at all events. There is no doubt but that next session a Bill agreeable to the House as a whole, and having for its end the fostering of technical education throughout the colony, will be placed on the statute book.

BALANCE-SHEET for Year ending 28th February, 1898.

| *Receipts.* | £ s. d. | *Expenditure.* | £ s. d. |
|---|---|---|---|
| To Balance from 1896-97 .. .. | 5 6 0 | By Teachers' fees .. .. .. | 57 18 6 |
| Special Government subsidy .. .. | 50 0 0 | Printing, advertising, and stationery .. | 8 8 4 |
| Members' subscriptions .. .. .. | 1 10 0 | Material for students .. .. .. | 4 10 6 |
| Students' fees .. .. .. .. | 45 12 6 | Gas account and janitor .. .. | 9 10 0 |
| Students' material refunded .. .. | 3 13 6 | Secretary .. .. .. .. | 5 5 0 |
| Government subsidy .. .. .. | 10 15 9 | Balance .. .. .. .. | 32 5 3 |
| Interest .. .. .. .. | 0 19 10 | | |
| | £117 17 7 | | £117 17 7 |

Examined and found correct.
R. J. CUMMING, Auditor, 1st March 1898.

W. A. MCCAW,
Hon. Secretary and Treasurer.

TE ONEROA TECHNICAL CLASSES ASSOCIATION.

COMMITTEE'S REPORT.

THE classes were commenced in April and were held continuously during the last three quarters of the year, the terms being coincident with the quarters. The instructor was Mr. S. Percy Seymour, B.A., and the subjects of instruction included arithmetic, algebra, a little geometry, and the first five chapters of Gordon's "Mining and Engineering," the consideration of the sixth and subsequent chapters being postponed till the students should have acquired some facility in dealing with mathematical formulæ. Supplementary lectures were given on mining geology and chemical philosophy, so as to give the students an intelligent idea of the methods employed and terms used in mineralogy and chemical analysis. The want of proper apparatus and materials prevented any practical instruction being given in laboratory work. The class met five times each week, and the duration of each meeting was two hours and a half. The total number of students enrolled during the year was fifteen; the number attending at the end of the year was eleven. Each student was able to attend only on alternate weeks. The receipts were: Fees, £41 10s.; capitation, £10 16s. 6d. According to a provisional arrangement made with Mr. Seymour, the whole receipts were paid to him, and he provided the necessary accommodation for the class, together with furniture, apparatus, fuel, and light. The association has, therefore, neither a surplus in hand nor liabilities to meet.

I have, &c.,

Preservation Inlet, 10th February, 1898. JOHN MCLAUGHLIN, Hon. Secretary.

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## STATEMENT RESPECTING CLASSES HELD UNDER THE PROVISIONS OF "THE MANUAL AND TECHNICAL ELEMENTARY INSTRUCTION ACT, 1895."

| Subject. | Number of Meetings per Week. | Number of Hours per Meeting. | Number of Students. | Average Attendance. |
|---|---|---|---|---|
| *Technical School Association, Auckland, for term ending 2nd July, 1898.* (Classes meet for four terms in the year.) | | | | |
| Freehand drawing | 2 | 2 | 15 | 14·6 |
| Mechanical drawing and machine construction | 2 | 2 | 10 | 6·05 |
| Architectural drawing and building construction | 2 | 2 | 16 | 10·95 |
| Carpentry and joinery | 2 | 2 | 18 | 6·12 |
| Wood-carving (day) | 1 | 2 | 10 | 8·3 |
| " (evening) | 2 | 2 | 8 | 5·35 |
| Plumbing | 2 | 2 | 11 | 7·95 |
| Graining and marbling | 1 | 2 | 7 | 4·3 |
| Algebra and geometry | 1 | 2 | 7 | 3·3 |
| Shorthand | 1 | 1 | 7 | 5·5 |
| Totals | .. | .. | 109 | 72.42 |
| *Mr. W. I. Robinson's Classes at Auckland, Remuera, Onehunga, and Ponsonby, for quarter ending 30th June, 1898.* (Classes are held for four terms of twelve weeks each.) | | | | |
| Mechanical drawing, Machine construction, Plane and solid geometry, Applied mechanics, Engineering | 6 | 2 | 92 | 71 |
| *Education Board, Auckland: Devonport Public School, for term ending 25th November, 1897.* (Class is held for three terms of three months each.) | | | | |
| Carpentry and joinery | 2 | 2 | 14 | 12·4 |
| *Education Board, Auckland: Remuera Public School, for term ending 31st March, 1898.* (Class meets for four terms of three months each.) | | | | |
| Carpentry | 1 | 3 | 8 | 7·7 |
| *The "Elam School of Art and Design," Auckland, for period ending 18th June, 1898.* (Classes meet for nine months in the year.) | | | | |
| Science and art subjects, including geometrical, perspective, and mechanical drawing, design, shading, and painting | 8 | 2 | 65 | 18·60 |
| *Gisborne Technical Instruction Society, for term ending 20th December, 1897.* | | | | |
| Book-keeping | 2 | 2 | 12 | 11·5 |
| Shorthand | 1 | 2 | 10 | 7·8 |
| Totals | .. | .. | 22 | 19·3 |
| *Misses Hardie and Manning's Classes at Napier and Hastings, for terms ending 28th July, 1898.* (Classes meet for three terms in a year.) | | | | |
| Shorthand (eight classes) | 32 | 1 to 2 | 16 | 12·84 |

STATEMENT respecting Classes held under the provisions of "The Manual and Technical Elementary Instruction Act, 1895,"—*continued.*

| Subject. | Number of Meetings per Week. | Number of Hours per Meeting. | Number of Students. | Average Attendance. |
|---|---|---|---|---|
| *Education Board, Wanganui: Technical School, for term ending 8th July, 1898.* (Classes meet for four terms of ten weeks each.) | | | | |
| Freehand from flat examples | 1 | 2 | 2 | 1·8 |
| Scale drawing | 1 | 1 | 2 | 1·8 |
| Practical plane geometry | 1 | 2 | 7 | 5·9 |
| Freehand on the blackboard | 1 | 1 | 7 | 5·9 |
| Model drawing (two classes) | 4 | 2 | 25 | 22·3 |
| Solid geometry | 1 | 1 | 15 | 13·8 |
| Drawing and shading from the cast (two classes) | 4 | 2 and 3 | 13 | 11·3 |
| Painting from cast (monochrome) | 3 | 2 | 5 | 4·23 |
| Painting (three classes) | 4 | 2 and 3 | 22 | 20·7 |
| Wood-carving | 1 | 2 | 16 | 13·3 |
| Modelling in clay | 1 | 2 | 2 | 1·6 |
| Woodwork (two classes) | 2 | 1 and 2 | 15 | 13·0 |
| Dressmaking | 1 | 2 | 4 | 3·5 |
| Building construction | 2 | 2 | 5 | 4·5 |
| Machine " | 2 | 2 | 5 | 4·2 |
| Botany | 1 | 1 | 3 | 3·0 |
| Experimental science | 1 | 1 | 21 | 18·0 |
| Shorthand | 2 | 1 | 4 | 3·45 |
| Totals | .. | .. | 173 | 135·28 |
| *Education Board, Wanganui: Palmerston North Art Classes, for term ending 2nd July, 1898.* (Classes meet for four terms of ten weeks each.) | | | | |
| Drawing (Freehand, scale, blackboard, model, plane and solid geometry), six classes | 6 | 1 and 2 | 62 | 51·4 |
| *Masterton Technical School, for term ending 31st December, 1897.* (Classes are held for three terms between April and December.) | | | | |
| Drawing | 2 | 1½ | 32 | 24·36 |
| Agricultural chemistry | 1 | 1½ | 10 | 7·0 |
| Shorthand | 1 | 1½ | 11 | 9·0 |
| Book-keeping | 1 | 1½ | 13 | 10·22 |
| English and arithmetic | 2 | 1½ | 21 | 16·0 |
| Totals | .. | .. | 87 | 66·58 |
| *Education Board, Wellington: Cross Creek Public School, for term ending 31st December, 1897.* (Class meets for four terms in a year.) | | | | |
| Carpentry | 2 | 1 | 18 | 12·4 |
| *Education Board, Wellington: Mauriceville West Public School, for term ending 31st March, 1898.* (The class meets for four terms in a year.) | | | | |
| Woodwork | 2 | 1 | 16 | 13·65 |
| *Education Board, Wellington: Technical School, for term ending 23rd April, 1898.* (Classes are held for four terms of ten weeks each during the year.) | | | | |
| General drawing (three classes) | 4 | 2 | 65 | 58·5 |
| Geometry and perspective (three classes) | 3 | 1 & 2 | 69 | 52·08 |
| Advanced geometry | 1 | 2 | 10 | 9·0 |
| Drawing (public school class) | 1 | 2 | 60 | 54·0 |
| Design (two classes) | 2 | 2 | 9 | 7·7 |
| Mechanical drawing (two classes) | 3 | 2 | 37 | 28·2 |
| Architectural drawing (two classes) | 3 | 2 | 28 | 22·72 |
| Painting (two classes) | 3 | 3 | 12 | 10·5 |
| Monochrome (two classes) | 3 | 2½ | 57 | 51·76 |
| Drawing from life | 2 | 2 | 8 | 7·42 |
| Wood-carving (four classes) | 6 | 2 | 25 | 22·6 |
| Theory of plumbing | 1 | 2 | 16 | 12·0 |
| Practical plumbing (two classes) | 3 | 2 | 22 | 19·0 |
| Woodwork (two classes) | 3 | 1 & 2 | 28 | 18·7 |
| Drawing—teachers (three classes) | 3 | 1 & 2 | 135 | 109·6 |
| Mathematics (two classes) | 3 | 2 | 43 | 39·0 |
| Carpentry (two classes) | 3 | 2 | 13 | 10·35 |
| Shorthand | 1 | 2 | 21 | 18·18 |
| Singing (two classes) | 2 | 1 | 127 | 88·9 |
| Totals | .. | .. | 780 | 640·21 |
| *Education Board, Wellington: Paraparaumu Public School, for term ending 1st March, 1898.* | | | | |
| Carpentry | 1 | 2 | 10 | 6·6 |
| *Education Board, Westland: Kumara Public School, for term ending 31st March, 1898.* (Classes meet for four terms in the year.) | | | | |
| Carpentry | 6 | 1 | 29 | 8·95 |

STATEMENT respecting Classes held under the provisions of "The Manual and Technical Elementary Instruction Act, 1895,"—*continued.*

| Subject. | Number of Meetings per Week. | Number of Hours per Meeting. | Number of Students. | Average Attendance. |
|---|---|---|---|---|
| *Marlborough Education Board: For term ending 30th June, 1898.* (Classes at Blenheim and Renwick Public Schools.) | | | | |
| Shorthand (two classes) .. .. .. .. | 1 | 2 | 77 | 65·2 |
| *Education Board, Grey: Greymouth District High School, for term ending 30th June, 1898.* (Class meets for four terms in the year.) | | | | |
| Carpentry .. .. .. .. .. | 2 | 1½ | 22 | 15·34 |
| *Education Board, North Canterbury: Normal School, Christchurch, for term ending 18th April, 1898.* (Classes meet for three terms of thirteen weeks each.) | | | | |
| Woodwork (eight classes) .. .. .. | 12 | 1 to 2 | 118 | 94·09 |
| *Education Board, North Canterbury: Leeston Public School, for term ending 7th May, 1898.* (Class meets for three terms of thirteen weeks each.) | | | | |
| Woodwork .. .. .. .. .. | 1 | 3 | 8 | 6·84 |
| *Young Men's Christian Association, Christchurch, for term ending 30th June, 1898.* (Class meets for four terms in the year.) | | | | |
| Shorthand .. .. .. .. .. | 5 | 2 | .. | 13·9 |
| *School of Domestic Instruction, Christchurch, for term ending 31st March, 1898.* (Classes meet for four terms of ten weeks each.) | | | | |
| Dressmaking (four classes) .. .. .. | 4 | 2 | 39 | 34·2 |
| Cooking (eight classes) .. .. .. .. | 8 | 2 | 142 | 119·1 |
| *Mr. C. H. Gilby, Christchurch, for term ending 1st July, 1898.* (Classes meet for four terms in a year.) | | | | |
| Shorthand (three classes: morning, afternoon, and evening) | 5 each | 2 | 119 | 56·91 |
| *Canterbury College: School of Art, Christchurch, for term ending 10th May, 1898.* (Classes meet for three terms in the year.) | | | | |
| Drawing from life (five classes) .. .. .. | 7 | 2 and 3 | 47 | 39·32 |
| Still life and antique (three classes) .. .. | 3 | 1½ and 3 | 38 | 34·09 |
| Modelling and drawing from the antique, and painting still life in monochrome | 1 | 2 | 7 | 6·25 |
| Sketching from nature .. .. .. .. | 1 | 6 | 13 | 8·90 |
| Modelling in clay (2 classes) .. .. .. | 2 | 1½ and 2 | 45 | 38·92 |
| Freehand drawing, elementary and advanced (including light and shade), (seven classes) | 7 | 1 to 2 | 132 | 115·95 |
| Model drawing, elementary and advanced (four classes) | 4 | 1 and 1½ | 165 | 139·67 |
| Drawing from the antique .. .. .. | 1 | 1½ | 29 | 25·08 |
| Plane and solid geometry: Elementary and advanced (three classes) | 5 | 1 and 1½ | 51 | 42·80 |
| Elementary perspective (two classes) .. .. | 2 | 1 and 1½ | 15 | 12·75 |
| Elementary geometry and perspective .. .. | 1 | 1½ | 42 | 30·92 |
| Design: Elementary and advanced .. .. | 1 | 1 | 58 | 51·66 |
| Architecture .. .. .. .. .. | 1 | 1 | 12 | 9·27 |
| Woodwork (two classes) .. .. .. .. | 2 | 2 and 1½ | 8 | 6·32 |
| Totals .. .. .. .. | .. | .. | 662 | 561·90 |
| *Miss A. M. Carr, Christchurch, for term ending 30th June, 1898.* (Classes meet for four terms in the year.) | | | | |
| Shorthand (three classes) .. .. .. | Daily | 2½ to 3 | 118 | 118 |
| *Technical Classes Association, Ashburton, for term ending 31st December, 1897.* (Classes meet for four terms in the year.) | | | | |
| Cookery .. .. .. .. .. | 1 | 2 | 17 | 16 |
| *Education Board, Otago: School of Art, Dunedin, for quarter ending June, 1898.* (Classes meet for four quarters in the year.) | | | | |
| Drawing:— | | | | |
| Light and shade (five classes) .. .. .. | 13 | 1 and 2 | 41 | 30·82 |
| Freehand (three classes) .. .. .. | 9 | 1 | 44 | 31·95 |
| Model (five classes) .. .. .. .. | 12 | 1 and 2 | 58 | 43·98 |
| Drawing from the life .. .. .. .. | 2 | 1½ | 13 | 9·61 |
| Practical geometry (three classes) .. .. | 6 | 1 to 2 | 42 | 32·42 |
| Solid geometry (two classes) .. .. .. | 4 | 1 and 2 | 9 | 7·51 |
| Perspective (two classes) .. .. .. | 4 | 1 | 22 | 15·5 |
| Geometry and perspective .. .. .. | 1 | 2 | 8 | 4·6 |
| Building construction .. .. .. .. | 2 | 2 | 12 | 9·71 |
| Machine drawing .. .. .. .. | 2 | 2 | 11 | 9·4 |
| Totals .. .. .. .. | .. | .. | 260 | 195·50 |

STATEMENT respecting Classes held under the provisions of "The Manual and Technical Elementary Instruction Act, 1895,"—*continued.*

| Subject. | Number of Meetings per Week. | Number of Hours per Meeting. | Number of Students. | Average Attendance. |
|---|---|---|---|---|
| *Technical Classes Association, Dunedin, for term ending 30th September, 1897.* (Classes meet for two terms of twelve weeks each, from April to September.) | | | | |
| Book-keeping (two classes) | 4 | 1 | 75 | 66·44 |
| Type-writing | 2 | 1 | 17 | 15·36 |
| Shorthand (two classes) | 2 | 1 to 1½ | 59 | 49·68 |
| Chemistry (three classes) | 3 | 2 to 2½ | 44 | 37·40 |
| Physics | 1 | 2 | 7 | 5·71 |
| Engineering | 2 | 1 | 15 | 13·16 |
| Plumbing (two classes) | 3 | 1 and 2 | 13 | 9·08 |
| Carpentry (two classes) | 3 | 1 and 2 | 23 | 16·85 |
| Wood-carving | 1 | 2 | 18 | 15·25 |
| Dressmaking | 1 | 2 | 10 | 9·16 |
| Cookery | 1 | 2 | 51 | 42·41 |
| Totals | .. | .. | 332 | 280·50 |
| *Education Board, Otago: Balclutha District High School, for term ending 30th June, 1898.* (Class meets for two terms between April and September.) | | | | |
| Carpentry | 1 | 2 | 28 | 27·5 |
| *Education Board, Otago: Tokomairiro District High School, for term ending June, 1898.* (Classes meet for two terms between April and September.) | | | | |
| Woodwork | 2 | 1 | 23 | 17·16 |
| Agricultural chemistry | 1 | 1 | 18 | 15·81 |
| Totals | .. | .. | 41 | 32·97 |
| *Technical Classes Association, Balclutha, for term ending 30th June, 1898.* (Classes meet for two terms between April and September.) | | | | |
| Book-keeping | 1 | 1 | 8 | 7·09 |
| Shorthand | 1 | 1 | 15 | 9·09 |
| Totals | .. | .. | 23 | 16·18 |
| *Mr. A. G. Kidston Hunter, Dunedin, for term ending 31st March, 1898.* (Classes meet for four terms in the year.) | | | | |
| Practical chemistry | 1 | 2 | 10 | 7 |
| Theoretical chemistry (four classes) | 11 | 1 to 3 | 12 | 9 |
| Botany | 1 | 2 | 4 | 3 |
| Totals | .. | .. | 26 | 19 |
| *Technical Classes Association, Romahapa, for quarter ending 30th June, 1898.* (Classes meet for one term in the year.) | | | | |
| Book-keeping | 1 | 2 | 14 | 12 |
| Dressmaking | 1 | 2 | 8 | 7 |
| Totals | .. | .. | 22 | 19 |
| *Technical Classes Association, Waiwera South, for term ending 21st December, 1898.* (Classes are held from June to September.) | | | | |
| Painting | 1 | 3½ | 8 | 7·61 |
| *Technical Classes Association, Te Oneroa, for term ending 30th June, 1898.* (Class meets for four terms in the year.) | | | | |
| Mathematics and mining | 5 | 2½ | 6 | 2·36 |
| *Technical Classes Association, Invercargill, for term ending 9th July, 1898.* (Classes meet for two terms between April and September.) | | | | |
| Woodwork (two classes) | 2 | 2 | 32 | 26·10 |
| Book-keeping | 2 | 2 | 7 | 5·75 |
| Wood-carving | 1 | 2 | 9 | 7·40 |
| Dressmaking | 1 | 2 | 9 | 8·70 |
| Chemistry | 1 | 2 | 10 | 8·60 |
| Carpentry | 1 | 2 | 12 | 9·90 |
| Drawing (two classes) | 2 | 2 | 26 | 22·70 |
| Totals | .. | .. | 105 | 89·15 |

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