

(No. 54.)



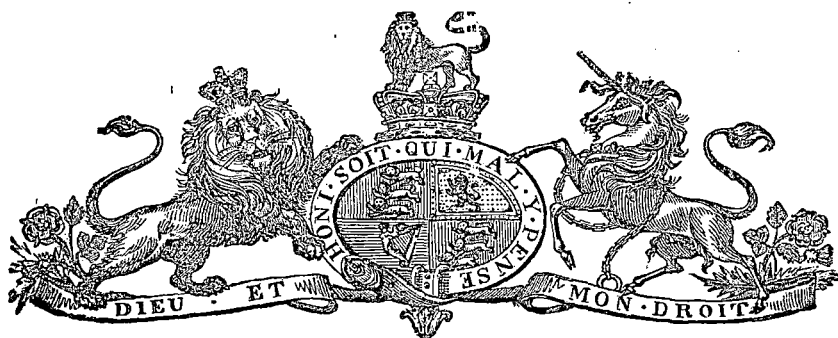
1862.

TASMANIA.

DEGREE OF ASSOCIATE OF ARTS.

REPORT OF EXAMINERS 1862.

Laid upon the Table by Mr. Henty, and ordered by the House to be printed,
14 October, 1862.



TASMANIAN COUNCIL OF EDUCATION.

DEGREE OF ASSOCIATE OF ARTS.—SEPTEMBER, 1862.

IN conformity with the Rules and Regulations of the Tasmanian Council of Education, the Council have directed the publication of the names of the Candidates who have passed the Examination for the Degree of Associate of Arts to the satisfaction of the Examiners, and upon whom that Degree has been conferred accordingly.

FIRST CLASS.

None.

SECOND CLASS.

THOMAS WILLIAM CHAPMAN, Age 18, Hobart Town; Pupil of High School, Hobart Town: Rev. R. D. Harris, M.A., Rector. Awarded a Prize of Books, of the value of £5, for Latin.

THIRD CLASS.

JOHN WATERHOUSE EGGLESTON, Age 15, New South Wales; Pupil of Horton College, Ross, Tasmania: S. Fiddian, Esq., Head Master.

JOSEPH FRANCIS MATHER, Hobart Town; Pupil of City School, Hobart Town: H. M. Pike, Esq., Master.

JOHN PERCIVAL DOUGHTY, Age 15, Hobart Town; formerly of the City School, Hobart Town, H. M. Pike, Esq., Master,—now a Pupil of High School: Rev. R. D. Harris, M.A., Rector.

On the recommendation of the Examiners, the Council's Certificate of Merit has been awarded to—

CHARLES LENNOX STEWART, Age 17, who failed to obtain the Degree of Associate of Arts.

The Council have further directed the publication of the name of one Candidate, over the age of Nineteen years, who has also passed the Examination for the Degree of Associate of Arts to the satisfaction of the Examiners, and upon whom that Degree has been conferred accordingly.

FIRST CLASS.

JAMES TAYLOR, Age 19, Campbell Town; Pupil of High School, Hobart Town: Rev. R. D. Harris, M.A., Rector. Takes Honors in Latin, Greek, and Pure Mathematics, but is not eligible for Medals or Prizes, being above the prescribed age.

The Report of the Examiners, the Examination Papers, and the Regulations for the Examination, are annexed.

By Order of the Council,

MURRAY BURGESS, *Secretary.*

24th September, 1862.

TASMANIAN COUNCIL OF EDUCATION.

Hobart Town, 12th March, 1861.

THE Council of Education have directed the publication of the following Scheme of Examination for the Degree of Associate of Arts for the year 1862.

The conditions upon which the Degree is granted, and Honours and Prizes are awarded, are also published for general information.

By Order of the Council,

MURRAY BURGESS, *Secretary.*

SKETCH of the Examination for the Degree of ASSOCIATE of ARTS for the Year 1862.

ENGLISH.—The Candidate will be examined in the Etymology and Grammatical construction of the Language; in English History, from the Accession of Henry VIII. to death of Charles II.; and will be required to write a short original Composition, or a Report founded upon some abstract of facts furnished to him. He will also be examined in Physical, Commercial, and Political Geography. Books recommended: Trench's English, Past and Present (3s. 6d., Parker), Morell's Grammar and Analysis with the Exercises (3s. 6d., Constable), Cornwell's School Geography (3s. 6d., Simpkin and Co.), and Hughes's Physical Geography (3s. 6d., Longman.)

LATIN.—Virgil, *Æneid*, Book II.; Horace, *Odes*, Books III. and VI.; and Livy, Book XXI. Questions will also be given on the parsing, and the historical and geographical allusions. A passage for translation from some other Latin author, and a passage of English for translation into Latin.

GREEK.—Xenophon's *Anabasis*, Book IV.; Homer's *Iliad*, Book IV.; and Euripides *Hecuba*. Questions on the parsing and the historical and geographical allusions. A passage for translation from some other Greek author.

FRENCH.—Passages will be given from Voltaire's *Charles the XII.*, and Madame de la Rochejaquelein's *Memoirs of the Vendean War*, for translation into English; with questions

on parsing, and the historical and geographical allusions. Also, a passage from some other French author for translation into English, and from some English author into French.

GERMAN.—Passages will be given from Schiller's *Revolt of the Netherlands*, or *Wallenstein*; with questions on the parsing, and the historical and geographical allusions. Also, a passage from some other German author for translation into English, and from an English author into German.

ITALIAN.—Candidates in this Section will be examined in Silvio Pellico; with questions on the parsing and grammatical construction. Also, a passage from some other Italian author for translation into English, and from an English author into Italian.

PURE MATHEMATICS.—Questions will be set in Euclid, Books I. II. III. IV.; Arithmetic; and Algebra. Candidates for Honors will be required to satisfy the Examiners in Euclid, Books VI. and XI., as far as Proposition xxi.; Plane Trigonometry; the use of Logarithms; and Mensuration.

NATURAL PHILOSOPHY.—The Candidate must be prepared to answer questions set in Newth's *First Book of Natural Philosophy*.

CHEMISTRY.—The Candidate will be examined in Inorganic Chemistry. Book recommended: Wilson's *Chemistry* (3s., Chambers' Educational Course.)

ZOOLOGY AND BOTANY.—Elementary questions will be set on the description and classification of animals, their habits and geographical distribution; and on the mercantile and industrial uses of animal products. Also, the description and classification of plants, their uses, and geographical distribution. Plants, and parts of plants, will be given for description. Text Books: Milne Edwards' *Zoology* (7s. 6d., Renshaw), and Lindley's *Elements of Botany* (12s., Bradbury.)

GEOLOGY.—The Candidate will be examined in Page's *Introductory Text Books of Geology* (5s., Blackwood.)

DRAWING AND ARCHITECTURE.—Drawing from the Flat, from Models, from Memory, and in Perspective; and Drawing from Plans, Sections, and Elevations. Design in Pen and Ink and in Colour. A fair degree of skill in freehand Drawing will be required, in order that a Student may pass in this Section.

PRELIMINARY EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

PREVIOUSLY to the Examination for the Degree of Associate of Arts, every Candidate will be required to satisfy the Examiners in—

1. Reading aloud a passage from some English Prose Author.
2. Writing from Dictation.
3. The Analysis and Parsing of a passage from some standard English Author.
4. The first four Rules of Arithmetic, Simple and Compound.
5. Geography. Under this head a competent knowledge will be required of the chief ranges of mountains, the principal rivers, the principal towns, and the coast line of one or more of the countries in the following list:—England, Scotland, Ireland, Europe, Asia, Africa, North America, South America, Australasia.
6. The outlines of English History since the Conquest; that is to say,—the succession of Sovereigns, the chief events, and some account of the leading men in each reign.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.

THE Examination for those Students who have satisfactorily passed the Preliminary Examination will comprise the subjects mentioned in the following ten Sections; in four of which at least, Latin or Pure Mathematics being one, the Candidate must satisfy the Examiners:—

- | | |
|---|-------------------------------|
| 1. English. | 7. The Elements of Chemistry. |
| 2. Latin. | 8. Zoology and Botany. |
| 3. Greek. | 9. Drawing and Architecture. |
| 4. French, German, or Italian. | 10. Geology. |
| 5. Pure Mathematics. | |
| 6. The Elementary Principles of Hydrostatics and Mechanics. | |

PRIZES.

1. Prizes of the value of £20 each, to consist of the Council's Gold Medal and Books of the value of £10, will be awarded to those Candidates who most distinguish themselves in the following subjects:—(1.) English; (2.) Latin; (3.) Greek; and (4.) Mathematics. These Prizes, however, will not be awarded to any Candidate who shall not be placed by the Examiners in the First Class of the Associate of Arts.

2. Second Prizes of Books, of the value of £5 each, will, at the discretion of the Examiners, be also given in the above four mentioned subjects.

3. Subject to the stipulations laid down in Clause 1, the Council's Gold Medal will be awarded to the Candidate who shall most distinguish himself in some one of the subjects in Section 4,—French, German, or Italian. It is clearly to be understood, however, that only one Medal will be awarded for the Section, which will be gained by the Candidate who displays the highest proficiency in the language in which he submits himself to be examined.

4. Prizes of the value of £5 each will, at the discretion of the Examiners, be awarded to the Candidates who most distinguish themselves in Sections 6, 7, 8, 9, and 10; namely,—the Elementary Principles of Hydrostatics and Mechanics; the Elements of Chemistry, Zoology, and Botany; Drawing and Architecture; Geology. In the event of any Candidate being specially recommended by the Examiners as displaying a high order of proficiency in one or other of the above subjects, the Council will be prepared to award their Gold Medal to such Candidate.

EXAMINERS' REPORT.

MR. PRESIDENT AND MEMBERS OF THE TASMANIAN COUNCIL OF EDUCATION.

You have had already laid before you the results of the Third Examination for the Degree of Associate of Arts; and the Examiners appointed by you to conduct that Examination desire now to submit a full Report of it.

The several subjects, and the values attached to them, as well as the number of marks qualifying for each Class, remained unchanged from last year. One only peculiarity marked this Examination,—the presence of a Candidate over the prescribed age; but of this the Examiners were not aware till after the Examination was closed.

Before proceeding to discuss the results of the Examination for the Degree, the Preliminary Examination claims a passing notice.

It has always been the intention of the Examiners to make this a strictly Rudimentary Examination. A portion of it is necessarily *viva voce*,—viz., the Reading aloud; and in addition to this it has been customary to ask orally a few leading questions on History and Geography. The *viva voce* Examination in these latter subjects has not, however, on any occasion been allowed to count against a Candidate, as failure in it may be caused by nervousness; but a good *viva voce* has been taken to compensate for defects in the answering on paper.

This *viva voce* Examination was this year decidedly inferior to that in either of the past years. With one or two creditable exceptions, the Candidates showed neither readiness nor correctness in their answers in Geography or History; nor was the answering on paper good, though there were only two Candidates who failed to satisfy the limited requirements of the Examiners. One of these two failed in Arithmetic also; in which subject, however, there was on the whole a marked improvement, as also in English, in which no Candidate was rejected. The blunders in Geography were gross and inexplicable; but, as regards the deficiencies in History, the Examiners are of opinion that, generally, attention had been paid exclusively to that portion of British History prescribed for the Degree Examination, to the neglect of those additional portions required for the Preliminary. To this fault—the neglect of the Preliminary work—it has been necessary on previous occasions to call the attention of Candidates and of their Instructors; and the Examiners regret that it is again incumbent on them to do so. It is not necessarily a discredit for a Candidate to fail in the Examination for the Degree: on the contrary, it may be desirable that boys should come up for practice, even though they have not yet learnt sufficient to make them pass: but no school-boy of the age of 14 ought to fail in the Preliminary Examination.

Two Candidates, then, having been rejected at the Preliminary Examination, there remained nine who had qualified themselves for admission to the Degree Examination.

Before making any remarks upon this as a whole, it will be well to embody in the Report the results of the Examination in each of the prescribed subjects, and the remarks of the Examiners thereon. In so doing, the order of the subjects in the Regulations of the Council will be followed.

I. ENGLISH, INCLUDING HISTORY AND GEOGRAPHY.

Two Papers were set : one on the Language, the other on History and Geography ; and the marks allotted to the subject divided equally between them. Neither Paper was *well* answered ; and the only portion of the work for which credit can fairly be given to the Candidates is the preparation of Morell's Analysis. Both in History and Geography there was a lack of the knowledge that might have been fairly expected ; and what was known was marred by inaccuracy of statement.

No Candidate obtained three-quarters of full marks—the number necessary for passing with credit ; three fell below one-third, the number required for passing. The average answering of those who passed was inferior to last year's, being valued at 525 against 553.

II. LATIN.

Was presented by all the Candidates. Three passed with credit, three passed ; and three failed, all from ignorance of the elementary grammar of the language. Among those who passed, however, the answering was, on the average, superior to last year's, though no one obtained so large a number as the best Candidate last year. While the books prescribed had been in the main well and carefully prepared by those who passed, the Examiners regret to observe how little real knowledge of the language and of its grammatical structure had been gained by them, as was shown by the weakness of the attempts made by them to translate a passage of Latin at sight, and to translate from English into Latin.

III. GREEK.

Four Candidates. One rejected, two passed, and one passed with credit. The work of those who passed was commendable, and, on the average, superior to last year's ; but very much the same remarks as those made on Latin apply to this subject also.

IV. MATHEMATICS.

Nine Candidates. Two passed with credit, three passed, four were rejected. The answering, on the whole, was poor ; though indications of mathematical ability were given by more than the two Candidates who rank highest by marks. The average number of marks obtained was 215, and the highest 353 out of 800.

Exactly the same remarks on the carelessness and the want of clearness and precision exhibited as were made in last year's Report might be added. It is much to be regretted that in some instances really good work was thus disfigured and spoiled.

The second Paper, embracing the three higher subjects, contained a large amount of simple straightforward book-work, but was left untouched by three Candidates, and very slightly attempted by three others. One who obtained no marks in it, though he sent up attempts, stood second on the first Paper. The average answering in this subject shows a falling off from last year's standard.

V. NATURAL PHILOSOPHY.

Three Candidates. None passed. The work sent up was miserable. The Text Book prescribed—only *ninety-six* pages of which need be read—could not have been studied by any of the Candidates : it is of a very simple character, and well within the reach of any fit Candidate for the Degree ; but, although at least two-thirds of the Paper were taken directly from the one Text Book, no Candidate obtained one-eighth of the full marks.

VI. FRENCH.

Nine Candidates. Eight passed, none with credit ; one was rejected.

VII. GEOLOGY.

Three Candidates. All passed ; none with credit.

VIII. DRAWING AND ARCHITECTURE.

Two Candidates ; both rejected. As no books had been prescribed for this year, the questions set were of the most simple and elementary character ; but the answering was unsatisfactory. Indeed it would seem that, this year, the subject had been taken up without any previous study or practice, with a view of securing a few chance marks.

Such are the comments of the Examiners on the several portions of the Examination just closed. Taken as a whole, it is undoubtedly inferior to that of last year,—perhaps even to that of 1860. The Statistics of the three years stand thus :—

Total number of Candidates	12	12	11
Rejected at Preliminary Examination..	3	2	2
Admitted for examination	9	10	9
Passed for Associate of Arts	4	8	5
First Class	3	2	1
Second Class	1	2	1
Third Class	0	4	3

In no subject whatever did the marks obtained by the Candidate who did best in that subject come up to those reached last year. And the solitary First Class of this year (though competing, as we have already said, at an age beyond that fixed,) falls far short in total marks of either of those placed in the First Class last year.

At the same time, it must be remembered that fluctuations will occur from year to year, and that it is not reasonable to expect that every year shall present a marked improvement on the last. Indeed it is probable that several of the Candidates this year came up without the expectation of passing, merely for the lesson to be derived from the experience of an Examination. Of the four rejected, three failed both in Latin and in Mathematics,—one or other of which is, by the Regulations of the Council, compulsory ; one failed in every subject he presented. Such Candidates could hardly have anticipated success.

There are, indeed, though at first sight the results of this Examination may appear discouraging, certain grounds for hope and for satisfaction, in this respect, that though the Candidates who have passed do not display so great a proficiency as last year, they have evidently been better grounded and more carefully drilled. If the Associate of Arts Examination produced nothing more than this effect—of making the early School teaching more precise and careful—it would not have been in vain.

Another ground for satisfaction is, that Candidates have found out the wisdom of concentrating their work. Four out of the five who passed presented only five subjects ; one did present seven, but failed in two of them. Had he let those two alone, and worked harder at the five, he would probably have been a class higher.

The main faults of the Candidates could, in the opinion of the Examiners, be remedied by practice in written Examinations. They frequently miss the point of a question ; or are, particularly in the case of Mathematics, too impatient to study a problem, but abandon it at once if they do not at a glance see the way to its solution ; and even if they see the drift of a question, and know the answer, that answer will probably contain some glaring inaccuracy which the slightest care should have detected.

Candidates should be trained in writing the answers to Papers, particularly to the Associate of Arts Papers of previous years ; their answers should then be carefully gone over with them, and their errors, both of facts and of style, pointed out.

The Papers of this year are certainly not harder than those set before ; but, though the Examiners give this as their opinion of them as a whole, they may take this opportunity of stating that each Examiner is solely responsible for the Papers in his own subject.

As regards Prizes—other than the position in the Class List, which is the highest Prize of all, as given for general, while the others are for special, attainments only,—the Examiners regret that they have so few to recommend.

The best Candidate of the year (Taylor) is, by the Regulations, too old to receive the Medals, which he would otherwise have gained ; and no other Candidate has been placed in the First Class.

The Examiners recommend that a Prize of Books be awarded to Chapman for the creditable manner in which he passed in Latin.

Stewart was not successful in obtaining the Degree, but is recommended for the Certificate of Merit issued by the Council to Candidates who have attained a certain number of marks short of that required for the Degree.

Appended to this Report will be found the General and the Special Class Lists, together with the Examination Papers,—for the preparation of which, with great accuracy and dispatch, the Examiners are much indebted to the courtesy and attention of Mr. Robarts.

For the Examiners,

M. H. IRVING, *M.A., Chairman.*

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS—SEPTEMBER, 1862.

GENERAL CLASS LIST.

FIRST CLASS.

NAME.	MARKS.	AGE.		SCHOOL.	SCHOOLMASTER.
None.					

SECOND CLASS.

Chapman, Thomas William..	2,028	18	Recommended for Prize of Books for Latin.	High School, Hobart Town	Rev. R. D. Harris, M.A., Rector.
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THIRD CLASS.

Eggleston, John Waterhouse.	1,776	15	—	Horton College, Ross	S. Fiddian, Esq., Head Master.
Mather, Joseph Francis.....	1,750	18	—	City School, Hobart Town	H. M. Pike, Esq., Master.
Doughty, John Percival	1,597	15	—	City School, Hobart Town, and High School, Hobart Town	H. M. Pike, Esq., Master. Rev. R. D. Harris, M.A., Rector.

Candidate who failed to obtain the Degree of A.A., but is recommended by the Examiners for the COUNCIL'S CERTIFICATE of MERIT.

Stewart, Charles Lennox, age 17, Horton College, Ross, S. Fiddian, Esq., Head Master.

(Signed)

M. H. IRVING, M.A., } *Examiners in English,*
A. DAVENPORT, B.A., } *Latin, and Greek.*
R. O. T. THORPE, M.A., *Examiner in Pure Mathematics*
and Natural Philosophy.

FR. HARTWELL HENSLÖWE, *Examiner in French.*
C. GOULD, B.A., *Examiner in Geology.*
H. HUNTER, *Examiner in Drawing and Architecture.*

15th September, 1862.

SPECIAL CLASS LIST.

<i>English.</i>	<i>Latin.</i>	<i>Greek.</i>	<i>French.</i>	<i>Mathematics.</i>	<i>Geology.</i>
FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.	FIRST CLASS.
None	Chapman Doughty	None	None	Mather	None
SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.	SECOND CLASS.
Chapman Mather Doughty Eggleston	Mather Eggleston	Eggleston Chapman	Mather } Eggleston } Doughty Chapman	Eggleston Chapman Doughty	Mather Doughty

For the Examiners,

M. H. IRVING, M.A., *Chairman.*

15th September, 1862.

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION for the Degree of ASSOCIATE of ARTS.—September, 1862.

TABULATED RESULTS.

NAME AND MOTTO.	AGE.	SCHOOL.	TEACHER.	Englsh.	Latin.	Greek.	French.	Pure Mathematics.	Elementary Principles of Hydrostatics and Mechanics.	Drawing and Archi- tecture.	Geology.	TOTAL No. OF MARKS.	RESULT.
				Maximum Number of Marks.									
				1000	800	800	500	800	400	400	400	5100	
Chapman, Thomas William—Honestas.	18	High School, Hobart	Rev. R. D. Harris.	619	589c	452	205	163	—	—	—	2028	Second Class.
Eggleston, John Waterhouse—Pudor.	15	Horton College, Ross	S. Fiddian, Esq.	425	429	459	285	178	n.p.	n.p.	—	1776	Third Class.
Mather, Joseph Francis—Audax.	18	City School, Hobart	H. M. Pike, Esq.	527	453	—	285	242c	—	—	243	1750	Third Class.
Doughty, John Percival—Crescit occulto.	15	High School, Hobart	Rev. R. D. Harris.	487	552c	—	255	141	—	—	162	1597	Third Class.
Stewart, Charles Lennox—Justitia.	17	Horton College, Ross	S. Fiddian, Esq.	507	452	—	180	n.p.	n.p.	—	189	1328	Certificate of Merit.

NOTE.—n.p. not passed. c. passed with credit. — subject not attempted by Candidates.

For the Examiners,

M. H. IRVING, M.A., *Chairman,*

SEPARATE LIST.

(CANDIDATE OVER 19 YEARS OF AGE.)

FIRST CLASS.

NAME.	MARKS.	AGE.		SCHOOL.	SCHOOLMASTER.
Taylor, James.....	2,379	19	Takes Honors in Latin, Greek, and Pure Mathematics; but is not eligible for Medals or Prizes, being above the prescribed age.	High School, Hobart Town.	Rev. R. D. Harris, M.A., Rector.

(Signed)

M. H. IRVING, M.A., } *Examiners in English,*
A. DAVENPORT, B.A., } *Latin, and Greek.*
R. O. T. THORPE, M.A., } *Examiner in Pure Mathematics*
and Natural Philosophy.

FR. HARTWELL HENSLÖWE, *Examiner in French.*
C. GOUD, B.A., *Examiner in Geology.*
H. HUNTER, *Examiner in Drawing and Architecture.*

15th September, 1862.

SPECIAL CLASS LIST.

(SPECIAL LIST—CANDIDATE OVER 19 YEARS OF AGE.)

<i>English.</i> Second Class.	<i>Latin.</i> First Class.	<i>Greek.</i> First Class.	<i>French.</i> Second Class.	<i>Mathematics.</i> First Class.
TAYLOR.	TAYLOR.	TAYLOR.	TAYLOR.	TAYLOR.

For the Examiners,

M. H. IRVING, M.A., *Chairman.*

TABULATED RESULTS

SPECIAL RETURN—CANDIDATE OVER 19 YEARS OF AGE.

NAME AND MOTTO.	AGE.	SCHOOL.	TEACHER.	English.	Latin.	Greek.	French.	Pure Mathematics.	Elementary Principles of Hydrostatics and Mechanics.	Drawing and Architecture.	Geology.	Total No. of Marks.
				Maximum Number of Marks.								
				1000	800	800	500	800	400	400	400	5100
Taylor, James—Perseverantia.	19	High School, Hobart Town.	Rev. R. D. Harris.	582	643c	576c	225	353c	—	—	—	2379

For the Examiners,

M. H. IRVING, M.A., *Chairman.*

DIRECTIONS TO CANDIDATES.

I. Look carefully at the annexed Time Table, in which the hours are fixed for the subjects of Examination on each day, and always *be at your seat in the Examination Room five minutes before the time.*

II. When the Questions are given you, read them over carefully, and *mark those which you think you can answer best; and do them first.* If, after that, you still have time to spare, try some of the others.

III. Before you begin to write your answers, insert in the blank spaces at the top of your paper,—

1. The *motto* by which you are known in the Examination.
2. The *subject* in which the questions are set which you are about to answer.
3. The number of the question. Not more than one question is to be answered on each sheet.

IV. In writing your answers—Write only on the ruled side of the paper.

V. As soon as notice is given, (which will be five minutes before the end of the time), finish your papers, and see that they are numbered rightly, and in their proper order.

VI. You are not to leave the Room until the Examination is closed, except by special permission of the Examiners.

N.B.—Candidates are strictly forbidden to communicate with one another during the Examination. Any Candidate taking an unfair advantage will be dismissed from the Examination.

EXAMINATION for the Degree of Associate of Arts—September, 1862.

T I M E T A B L E .

<i>Monday, 8th September.</i>	<i>Tuesday, 9th September.</i>	<i>Wednesday, 10th September.</i>	<i>Thursday, 11th September.</i>	<i>Friday, 12th September.</i>	<i>Saturday, 13th September.</i>
<p>10 to 1. PRELIMINARY. <i>Viva voce.</i> PAPER ON ARITHMETIC, HISTORY, & GEOGRAPHY.</p>	<p>10 to 1. MATHEMATICS I.</p>	<p>8'30 to 10'30. NATURAL PHILOSOPHY.</p>	<p>9 to 12. FRENCH.</p>	<p>8'30 to 11. ENGLISH.</p>	<p>8'30 to 11. HAND DRAWING. GEOLOGY.</p>
<p>2 to 5 PRELIMINARY. ENGLISH.</p>	<p>2 to 5. MATHEMATICS II.</p>	<p>11 to 2. LATIN I.</p>	<p>2 to 5. HISTORY & GEOGRAPHY.</p>	<p>11'30 to 2. GREEK I.</p>	<p>11'30 to 2. ARCHITECTURE.</p>
		<p>3 to 5'30. LATIN II.</p>		<p>3 to 5'30. GREEK II.</p>	<p>3 to 5'30. PERSPECTIVE, &c.</p>

TASMANIAN COUNCIL OF EDUCATION.

EXAMINATION FOR THE DEGREE OF ASSOCIATE OF ARTS.—SEPTEMBER, 1862.

Preliminary Examination.

MONDAY, 8TH SEPTEMBER, 1862. 10 A.M. to 1 P.M.

1. From eleven hundred thousand and four, take 1,097,047 : and divide 465651 by 93.
 2. Multiply 9½*d.* by 6000 ; and £8 16*s.* 5*d.* by 35 : and subtract the smaller product from the greater.
 3. Divide £1000 equally among 63 persons : what will be the share of each ?
 4. A person walks for 2 hours and 45 minutes, taking in each minute 110 steps of 30 inches each. What distance will he walk in the time ?
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5. Name the Tudor Sovereigns of England, with the date of the accession of each.
 6. Between whom, and in the reign of what English king, were fought the battles of Naseby, Culloden, Trafalgar, Bunker's Hill, Toulouse, and Plassy ?
 7. In the reign of what English monarch did the following persons live, and for what were they distinguished :—Thomas a'Beckett, Lord Bacon, Caxton, Edmund Burke, Sir Francis Drake, Perkin Warbeck ?
 8. What important events connected with English History occurred at Agincourt, Runnymede, Bannockburn, Hastings, Torbay, and Sedgemoor ?
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9. Name six at least of the principal rivers, and six at least of the principal seaports, of Continental Europe which would be passed in a coasting voyage from Gibraltar to Hamburg.
 10. Name in order, from north to south, the principal rivers and seaports of the east coast of Great Britain.
 11. How is each of the following mountain ranges situated with relation to the country named after it :—Ural, Russia ; Alps, Italy ; Lebanon, Syria ; Andes, South America ; Himalaya, Hindostan ; Pyrenees, Spain ?
 12. Describe the positions of the Gulf of Carpentaria, Washington, British Columbia, King George's Sound, St. Petersburg, Launceston, the Baltic, Nova Zembla.

2 P.M. to 5 P.M.

Passage read, to be written from Dictation :—

“Chaucer has been well compared to some warm bright day in the very early spring, which seems to say that the winter is over and gone ; but its promise is deceitful ; the full bursting and blossoming of the spring-time are yet far off. That struggle with France which began so gloriously, but ended so disastrously, even with the loss of our old ill-won dominion there, the savagery of our wars of the Roses, wars which were a legacy bequeathed to us by that unrighteous conquest, leave a great blank in our literary history, nearly a century during which very little was done for the cultivation of our native tongue, during which it could have made few important accessions to its wealth.”

1. Analyse this passage :—

“Now came still evening on, and twilight grey
Had in her sober livery all things clad.”

2. Parse every word in the following sentence :—

“Of all the beasts that graze the lawn, or hunt the forest, a dog is the only animal that, leaving his fellows, attempts to cultivate the friendship of man.”

3. Correct the errors in the following sentences, giving a reason for every correction :—

The children was all asleep. He as wrote to tell me were to send to, and who to send.

DEGREE EXAMINATION.

Mathematics.—I.

TUESDAY, 9TH SEPTEMBER, 1862. 10 A.M. to 1 P.M.

1. Distinguish between a 'Theorem,' a 'Problem,' and a 'Corollary;' also between a 'Postulate' and an 'Axiom.' Define a 'Right Angle.' When are two straight lines said to be parallel?
2. From a given point draw a straight line equal to a given straight line. Construct additional figures for the cases in which the given point is *on* the given line and *on* it produced.
3. From any point without a straight line only one straight line can be drawn to meet it, making with it on the same side of the line thus drawn an angle equal to a given angle.
4. If a straight line be divided into any two parts, the rectangles contained by the whole and each of the parts are together equal to the square on the whole line.
5. Find the centre of a given circle. Describe a circle that shall pass through any three points which are not in the same straight line.
6. Inscribe a circle in a given triangle.
7. What are the 'prime factors' of a number? Find those of 240, 810, and 3750. Thence obtain their greatest common measure and least common multiple.
8. Simplify $\frac{\frac{3}{2} \text{ of } \frac{5}{7} \text{ of } 3\frac{5}{9}}{\frac{1}{7} \text{ of } \frac{3}{4} \text{ of } 1\frac{3}{8}}$; and subtract the result from the sum of $4\frac{5}{8}$, $5\frac{3}{4}$, and $7\frac{3}{4}$.
9. Define a 'decimal,' and explain from what fractions circulating decimals arise. Multiply .00002 and 200.2. Give the corresponding fraction in its lowest terms.
10. Obtain the square root of 4782969, and the fourth root of 10.4976.
11. Explain the difference between interest and discount. Find the amount of £224 6s. 10½d. for 4½ years at 7 per cent. simple interest.
12. If £1 = 10 florins = 100 cents = 1000 milles: add together £374 5 florins 4 cents 7 milles, £924 3 cents 8 milles, and £934 6 florins 9 milles. Multiply the sum by 22, and express the result in terms of £ s. d.
13. Explain the use of 'brackets.' If a, b, c, d be numerical quantities, and $a > b$ and $c > d$, prove that $(a-b)(c-d) = ac + bd - ad - bc$.
14. Simplify $x - \frac{1}{2} \left\{ (1\frac{1}{2} - x) - \frac{1}{3} (2\frac{1}{2} - x) - \frac{2}{3} (1\frac{1}{2} - x - 2\frac{1}{4}) \right\}$.
And prove that if $s = \frac{a+b+c}{2}$, $1 - \left(\frac{a^2+b^2-c^2}{2ab} \right)^2 = \frac{4s(s-a)(s-b)(s-c)}{a^2b^2}$.
15. Prove the Rule for finding the Greatest Common Measure of any two algebraical quantities. Find that of $3x^5 - 3x^4 - 53x^3 - 43x^2 + 34x + 30$ and $3x^5 + 3x^4 - 53x^3 + 43x^2 + 34x - 30$.
16. Solve the Equations—

$$(1.) \quad \frac{x-b}{a} - \frac{x-c}{b} - \frac{x-a}{c} = 0. \quad (3.) \quad \sqrt{(x^2 - 4x + 12)} - \frac{(x-1)^2}{2} = 4 - x.$$

$$(2.) \quad \frac{1}{x-a} + \frac{1}{x-b} + \frac{1}{x-c} = 0.$$
17. Show that the roots of the equation $ax^2 + bx + c = 0$ are real and different, real and equal, or imaginary, according as $b^2 >$ or $< 4ac$. If α and β be the roots, prove that $ax^2 + bx + c = a(x-\alpha)(x-\beta)$ for all values of x .
18. A fires 5 rifle shots to B's 3. A hits once in every 3 shots, B once in every 2. In half an hour B has missed 18 shots. Through excitement and practice both improve, and B is quicker in preparing to fire, so that A fires only 4 times to B's 3: A hits twice in every 5 shots, and B twice in every 3. In the next half hour A misses 36 times. Which of them in the hour strikes the target the oftener?

Mathematics.—II.

TUESDAY, 9TH SEPTEMBER, 1862. 2 P.M. to 5 P.M.

1. Construct a diagonal scale; and divide a circle into any number of equal parts having their perimeters also equal, giving the proof.
2. Write down the Tables of Long Measure and Square Measure.

Find the superficies of a parallelopipedon, the length of which is 20 feet $6\frac{1}{2}$ inches, breadth 4 feet $5\frac{1}{4}$ inches, and depth 2 feet.

3. Describe Gunter's Chain, and the Theodolite. Explain their uses.
4. The radix of a scale of notation is a perfect cube. Prove that the number 1331 is divisible by the cube of the number formed by adding unity to the cube root of the radix.
5. Solve the Equations—

$$(1.) \quad x^3 - 4x - 15 = 0. \qquad (3.) \quad x^2 + y^2 + z^2 = 14$$

$$(2.) \quad \frac{y}{x} - xy + \frac{x}{y} = 2 = \frac{1 + xy}{3x^2y^2}. \qquad \begin{array}{l} xy + xz + yz = 11 \\ xyz = 6 \end{array}$$

6. Shew (1) that no three numbers in Arithmetical Progression are together equal to 125; and (2) that no three numbers can be at the same time in Arithmetical and in Geometrical Progression.
7. If equal weights of gold and silver are as 78 : 5, compare the weights of a sovereign and a shilling.
8. Given that the circumference of a circle varies as the radius, and that the circumference of a circle of radius 15 inches is 7 feet $10\frac{1}{2}$ inches, find that of a circle of radius 34 inches.
9. Prove that, by the use of Logarithms, the arithmetical operations of Multiplication and Evolution may be reduced to those of Addition and Subtraction.
10. Define 'similar' and 'reciprocal' figures.' When are two planes said to have the same inclination to one another that two other planes have?
11. Similar triangles are to one another in the duplicate ratio of their homologous sides.
12. If a solid angle be contained by three plane angles, any two of them is greater than the third.
13. Explain the different methods of measuring angles; and prove a simple formula by which the measure of any angle, according to one method, may be converted into its measure according to either of the other methods.
14. Define the several trigonometrical ratios; and, given the sine of an angle, determine its cosine. Explain the double sign of this value.
15. Find the sine of an angle of 120° ; and the tangent of one of 75° .
16. Expand $\sin. (A \pm B)$; and deduce the value of $\sin. A$ in terms of the $\sin.$ and $\cos.$ of $\frac{A}{2}$.
17. If $\sin. (\beta + \gamma - \alpha)$, $\sin. (\gamma + \alpha - \beta)$, and $\sin. (\alpha + \beta - \gamma)$ are in arithmetical progression, prove that $\tan. \alpha$, $\tan. \beta$, and $\tan. \gamma$ are also in arithmetical progression.
18. The two diagonals of a quadrilateral field are respectively a , b , and they are inclined to each other at an angle ϕ . Determine its area.

$$\begin{array}{l} \text{Ex.}—a = 7.45 \text{ chains.} \\ b = 5.76 \text{ chains.} \quad \phi = \frac{\pi}{3} \end{array}$$

Natural Philosophy.

WEDNESDAY, 10TH SEPTEMBER, 1862. 8½ A.M. to 10½ A.M.

1. Define 'Pressure' and 'Force.' Explain clearly that forces may be fully represented by straight lines. Justify the 'resolution of forces.'
2. When are forces said to be concurrent? Two non-concurrent parallel forces, P and Q , act at a distance a from each other: find the distance of the resultant force from either of them.
Define the 'Centre of Gravity' of a body. Prove that the centre of gravity of an equiangular triangle coincides with that of its circumscribing circle.
4. Name the several mechanical powers. Determine the mechanical advantage of the wheel and compound axle.
5. In the system of pulleys in which each hangs by a separate string, if P be equal to six pounds and W to forty-eight pounds, how many moveable pulleys will there be?
6. Describe the screw, and determine the condition of equilibrium on the screw. Construct a screw such that a force of 84 lbs. acting on an arm of ten times its radius may raise a weight of 3 tons.
7. Distinguish between 'accelerating force' and 'velocity.' How is velocity, when variable, measured?
8. Enunciate the Second Law of Motion, and describe experiments by which it is seen to hold good.
9. Prove the formulæ,—

$$s = \frac{1}{2}ft^2. \quad v^2 = 2fs. \quad v^2 = V^2 - 2gs.$$
10. Two weights of 5 lbs. and 4 lbs. together pull up one of 7 lbs. over a smooth fixed pulley, by means of an inextensible string; after descending through 2 feet the 4 lbs. weight is detached; through what space will the remaining 5 lbs. weight descend?
11. Define a fluid, and describe an experiment by which it may be shown that pressure, applied to a fluid mass in equilibrium, is transmitted equally and in all directions. Hence explain the use of the safety-valve.
12. If a fluid be poured into any one of a number of open vessels communicating freely it will rise to the same height in all. Prove this proposition, stating in full that upon which it depends.
13. Determine the conditions of equilibrium of a floating body. A log of timber, the weight of which : the weight of an equal volume of the fluid in which it is floating :: 3 : 5, will just bear a load of half a ton without sinking. Determine its weight.
14. Define 'specific gravity,' and show how to determine that of a fluid by means of the common hydrometer.
15. Two bodies, the specific gravity of which are s and s' respectively, balance each other on a straight lever without weight. If the whole be immersed in a fluid, the specific gravity of which is s'' , what alteration must be made in the position of the fulcrum that they may still balance?
Ex. : $s = 1.078. \quad s' = 2.653. \quad s'' = .87.$
16. Describe the construction and operation of the common air pump.
17. Explain the action of the syphon, and show under what circumstances the syphon will fail to act.
18. If it takes twice the power to support a given weight on an inclined plane ABC , when placed on the side AB , that it does when the plane is on the side BC , find the greatest weight which a power of 1 lb. can support on the plane.

Latin.—I.

WEDNESDAY, 10TH SEPTEMBER, 1862. 11 A.M. to 2 P.M.

HORACE, Odes, Books III and IV. LIVY, Book XXI.

[N.B.—Questions 1. 2. 3. must be answered to the satisfaction of the Examiner in order to entitle the Candidate to pass in Latin.]

1. Decline the plural of *tu* and of *qui*, the pres. indic. of *nolo*, and the imperf. pot. of *prosum*.
2. Write the dat. plur. of *senex*; the genit. plur. of *vis*; the abl. sing. of *ver*, of *vir*, and of *vis*; the 1 pl. plup. pot. act. of *maneo* and of *mano*; the dat. sing. fœm. of the future active participle of the verbs *vivo*, *adsum*, *refero*.
3. Translate literally,—

Hannibal, rebus prius, quam verbis, adhortandos milites ratus, circumdato ad spectaculum exercitu, captivos montanos vinctos in medio statuit; armisque Gallicis ante eorum pedes projectis, interrogare interpretem jussit, ecquis, si vinculis levaretur, armaque et equum victor acciperet, decertare ferro vellet? Quum ad unum omnes ferrum pugnamque poscerent, et dejecta in id sors esset, se quisque eum optabat, quem fortuna in id certamen legeret. Ut cujusque sors exciderat, alacer, inter gratulantes gaudio exsultans, cum sui moris tripudiis arma raptim capiebat. Ubi autem dimicarent, is habitus animorum non inter ejusdem modo conditionis homines erat, sed etiam inter spectantes vulgo, ut non vincentium magis quam bene morientium, fortuna laudaretur.

Parse the words 'exciderat,' vincentium.

4. Translate into Latin,—

Liars are not easily believed. He came to see the battle. I advised my brother not to write the letter.

5. Translate,—

Aurum per medios ire satellites
 Et perrumpere amat saxa, potentius
 Ictu fulmineo. Concidit auguris
 Argivi domus, ob lucrum
 Demersa exitio; diffidit urbium
 Portas vir Macedo, et subruit œmulos
 Reges muneribus; munera navium
 Sævos illaqueant duces.
 Crescentem sequitur cura pecuniam
 Majorumque fames. Jure perhorruì
 Latè conspicuum tollere verticem,
 Mæcenæ, equitum decus.

Explain the historical allusions. Scan the last line, and give the name of its metre. Parse *diffidit*, *crescentem*, and *equitum*.

6. Translate,—

Quid debeas, O Roma, Neronibus,
 Testis Metaurum flumen, et Asdrubal
 Devictus, et pulcher fugatis
 Ille dies Latio tenebris,
 Qui primus almâ risit adorêâ,
 Dirus per urbes Afer ut Italas,
 Ceu flamma per tædas, vel Eurus
 Per Siculas equitavit undas.
 Post hoc secundis usque laboribus
 Romana pubes crevit, et impio
 Vastata Pænorum tumultu
 Fana Deos habuere rectos.

Give the date of the event to which the Poet refers, and describe briefly the circumstances. Write the Roman names of the divinities worshipped as the Great Gods. Give the meaning of *Penates* and of *Lares*, distinguishing them.

7. Translate,—

Mirari se, quinam pectora semper impavida repens terror invaserit. Per tot annos vincentes eos stipendia facere; neque aute Hispania excessisse, quam omnes gentesque et terræ eæ, quas duo diversa maria amplectantur, Karthaginiensium essent. Indignatos deinde, quod, quicumque Saguntum obsedissent, velut ob noxam, sibi dedi postularet populus Romanus, Iberum trajecisse ad delendum nomen Romanorum, liberandumque orbem terrarum. Tum nemini visum id longum, quum ab occasu solis ad exortus intenderent iter. Nunc postquam multo majorem partem itineris emensam cernant, Pyrenæum saltum inter ferocissimas gentes superatum, Rhodanum, tantum annum, tot millibus Gallorum prohibentibus, domita etiam ipsius fluminis vi, trajectum, in conspectu Alpes habeant, quarum alterum latus Italiæ sit; in ipsis portis hostium fatigatos subsistere, quid Alpes aliud esse credentes, quam montium altitudines?

8. State accurately the geographical position of Saguntum, Ægates Insulæ, Ticinus, Trebia, Karthago Nova, Massilia, Baleares Insulæ, giving the modern names of the last five.
9. Explain the construction of the Roman Legion. What was its numerical strength—(1.) As originally established. (2.) At the period of the Second Punic War. (3.) In the time of Augustus?
10. Write English words containing the several roots of the following Latin words:—bis, caput, ire, dare, stare, cadere, cædere, capere, ridere, scandere, vivere,olvere.

Latin.—II.

WEDNESDAY, 10TH SEPTEMBER, 1862. 3 P.M. to 5.30 P.M.

VIRGIL.—Æneid, Book II.

[N.B.—Questions 1. 2. 3. must be answered to the satisfaction of the Examiner in order to entitle the Candidate to pass in Latin.]

1. Decline these words,—dea, dux, qui, uterque, vulgus, præceps.
2. Parse, and give the present, the perfect, the supine, and the infinitive of these verbs,—abluero, sensit, servassent, tutare, moriturus, edisserere.
3. Translate literally,—

“Ecce, manus juvenem interea post terga revinctum
Pastores magno ad regem clamore trahebant
Dardanidæ, qui se ignotum venientibus ultro,
Hoc ipsum ut strueret, Trojamque aperiret Achivis,
Obtulerat, fidens animi, atque in utrumque paratus,
Seu versare dolos, seu certæ occumbere morti.
Undique visendi studio Trojana juvenus
Circumfusa ruit, certantque illudere capto.
Accipe nunc Danaum insidias, et crimine ab uno
Disce omnes.”

4. Translate,—

Hæc fatus, latos humeròs subjectaque colla
Veste super fulvique insternor pelle leonis;
Succedoque oneri. Dextræ se parvus Iulus
Implicuit, sequiturque patrem non passibus æquis:
Pone subit conjux: ferimur per opaca locorum.
Et me, quem dudum non ulla injecta movebant
Tela neque adverso glomerati ex agmine Graii,
Nunc omnes terrent auræ, sonus excitat omnis,
Suspensum et pariter comitique onerique timentem.
Jamque propinquabam portis, omnemque videbar
Evasisse viam; subito quum creber ad aures
Visus adesse pedum sonitus, genitorque per umbram
Prospiciens, ‘Nate,’ exclamat, ‘fuge, nate; propinquant;
Ardentes clipeos atque æra micantia cerno.’

Hic mihi nescio quod trepido male numen amicum
 Confusam eripuit mentem. Namque avia cursu
 Dum sequor, et nota excedo regione viarum,
 Heu ! misero conjux fatone erepta Creüsa
 Substitit, erravitne via, seu lassa resedit,
 Incertum ; nec post oculis est reddita nostris.

5. In the preceding extract, why is *humeros* (line 1) accusative? *oneri* (line 3) dative? *comiti* (line 9) dative? *regione* (line 17) ablative? *fato* (line 18) ablative?

6. Give the meaning and the derivation of the following words occurring in this book :—*iners*, *cassus*, *acernus*, *stuppeus*, *bigæ*, *adytum*, *tabulata*, *exuviæ*, *æquævus*, *latebræ*.

7. Scan, and point out any peculiarity in these lines :—

- (1.) *Ædificant sectâque intexunt abiete costas.*
- (2.) *Constitit atque oculis Phrygia agmina circumspexit.*
- (3.) *Panthus Othryades arcis Phœbique sacerdos.*
- (4.) *Obstupui steteruntque comæ et vox faucibus hæsit.*

8. Translate and explain the constructions in—

— collo dare brachia circum.
 Fecissentque utinam—
 — sensit medios delapsus in hostes.
 Delitui dum vela darent si forte dedissent.

9. Translate,—

Omnino, qui reipublicæ præfuturi sunt, duo Platonis præcepta teneant : unum, ut utilitatem civium sic tueantur, ut, quæcumque agunt, ad eam referant, obliti commodorum suorum : alterum, ut totum corpus reipublicæ curent, ne, dum partem aliquam tuentur, reliquas deserant. Ut enim tutela, sic procuratio reipublicæ ad utilitatem eorum, qui commissi sunt, non ad eorum, quibus commissa est, gerenda est. Qui autem parti civium consulunt, partem negligunt, rem perniciosissimam in civitatem inducunt, seditionem atque discordiam : ex quo evenit, ut alii populares, alii studiosi optimi cujusque videantur, pauci universorum. Hinc apud Athenienses magnæ discordiæ, in nostra republica non solum seditiones, sed pestifera etiam bella civilia : quæ gravis et fortis civis et in republica dignus principatu fugiet atque oderit, tradetque se totum reipublicæ, neque opes aut potentiam consecrabitur, totamque eam sic tuebitur, ut omnibus consulat.

10. Translate into Latin—

When at length he understood by their signs that they wished to be informed whence he came, he pointed with great significance to the sky ; upon which the crowd, concluding him to be one of their deities, were proceeding to pay him divine honour ; but he no sooner comprehended their design than he rejected it with horror, and bending his knees and raising his hands towards Heaven in the attitude of prayer, gave them to understand that he also was a worshipper of the powers above.

French.

THURSDAY, 11 SEPTEMBER, 1862. 9 A.M. to 12.

1. Translate the following passage :—

Charles, qui s'était déterminé en un moment, n'eût jamais pu trouver en Pologne un homme plus capable de concilier tous les partis que celui qu'il choisissait; le fond de son caractère était l'humanité et la bienfaisance. Quand Stanislas fut depuis retiré dans le duché de Deux-Ponts, des partisans qui voulurent l'enlever, furent pris en sa présence: *que vous ai-je fait*, leur dit-il, *pour vouloir me livrer à mes ennemis? De quel pays êtes-vous?* Trois de ces aventuriers répondirent qu'ils étaient Français: *eh bien!* dit-il, *ressemblez à vos compatriotes, que j'estime, et soyez incabables d'une mauvaise action.* En disant ces mots, il leur donna tout ce qu'il avait sur lui, son argent, sa montre, sa boîte d'or, et ils partirent en pleurant et en l'admirant: voilà ce que je sais de deux témoins oculaires.

Je puis dire avec la même certitude, qu'un jour, comme il réglait l'état de sa maison, il mit sur la liste un officier français qui lui était attaché. En quelle qualité votre majesté veut-elle qu'il soit sur la liste, lui dit le trésorier? *En qualité de mon ami*, répondit le prince. J'ai vu un long ouvrage qu'il avait composé, pour réformer, s'il se pouvait, les lois et les mœurs de son pays; il sacrifie dans cet écrit les prérogatives de la noblesse dont il était membre, et de la royauté qu'on lui avait donnée, au bien public et aux besoins du peuple; sacrifice qui vaut des batailles gagnées.

Quand le primat de Pologne sut que Charles XII avait nommé le palatin Leczinsky, précisément comme Alexandre avait nommé Abdolonyme, il accourut auprès du roi de Suède pour tâcher de faire changer cette résolution; il voulait faire tomber la couronne à un Lubomirsky. *Mais qu'avez-vous à alléguer contre Stanislas Leczinsky*, dit le conquérant? *Sire*, dit le primat, *il est trop jeune.* Le roi répliqua sèchement. *il est à peu près de mon âge*, tourna le dos au prélat, et aussitôt envoya le comte de Hoorn signifier à l'assemblée de Varsovie qu'il fallait élire un roi dans cinq jours et qu'il fallait élire Stanislas Leczinsky.

2. How many conjugations are there in French? How are they distinguished? Give an example of each in the above passage, explaining what kind of verb it is, and whether regular or irregular.

3. Translate into French—

This young Italian, who had acquired so much importance in Scotland, and who was destined soon to meet with so tragical a fate, had come to Edinburgh during the month of December 1562, at about twenty-eight years of age. He came thither as *camerière* in the suite of the Savoy Ambassador, the Count of Moretto. He was a man of great intelligence, and possessed a more cultivated mind than was usual among the rough retainers of the Scottish Court. He was moreover an agreeable musician, and the Queen kept him as a *valet de chambre* when the Count of Moretto returned to Piedmont. Mary Stuart was endowed with a great taste for music, and had organized a band to play on the violin, lute, and flute for her amusement; she had also three singers in her pay, with whom Riccio was sometimes joined, as he had a good bass voice.

Finding that he was fully qualified for some higher office than that of a *valet de chambre*, she appointed him her Private Secretary in December 1564, on the dismissal of Ranlet. "He succeeded so well in this employment," says the Tuscan Ambassador in a despatch addressed to Duke Cosmo I., "that the greater part of the affairs of this kingdom passed through his hands. He managed them with so much prudence, and brought them to so satisfactory a conclusion, that he was greatly beloved by Her Majesty." It was he who had advised and effected her marriage with Darnley; it was he whose views, in conformity with Mary's opinions, tended to draw closer the connection between the Queen of Scotland, the Pope, and the King of Spain, and thus to separate her from England, and effect a rupture with the Protestant party.

4. In the above passage point out and explain any instances of the use of the Article where in English it is omitted; and explain also the use of the prepositions *de* and *à* when they occur.

5. How are the following phrases expressed in French?

Is she not your cousin's sister? No, she is not.
Is this your hat? Yes, it is.
Are these your books? Yes, they are.
Is your sister married? Yes, she is.

Are these young ladies your relations? No, they are not.
 I have congratulated him and his friends.
 He promised it to me.
 Will he not send you any?
 Shall we go thither?
 He does not give it them.
 Every country has its customs, laws, and prejudices.
 What I know is they have won.

6. Translate the following passage :—

Nous partîmes pour la Gascogne vers la fin du mois d'octobre 1789, avec mon oncle de Lorge et son second fils, le marquis de Civrac. Notre voyage s'effectua fort heureusement, et nous arrivâmes chez mon oncle, au château de Blaignac, près de Libourne. La vue de cette résidence est fort belle et le parc agréable. Mais la saison était mauvaise. Nous vivions dans un isolement absolu. Les chemins impraticables, et plus encore les menaces des paysans des environs, empêchaient qu'on pût voir le voisinage. Nous ne recevions que très-peu de visites, et je m'ennuyais beaucoup. Les paysans qui dépendaient de mon oncle étaient assez tranquilles, et il n'eut pas à s'en plaindre. Il est vrai de dire que mon grand-père et lui avaient toujours été excellents pour eux. Tous les dimanches, les villageois venaient danser au château, et ma seule distraction était d'aller danser avec eux.

Les matelots de la Dordogne ne se montrèrent point aussi paisibles ; ils détruisirent les pêcheries de mon oncle et de tous les riverains. Après huit mois de séjour à Blaignac, nous le quittâmes pour aller chez mon père, à Citran, dans le Médoc. Le pays était assez mauvais, mais Citran était depuis plus de six cents ans dans notre famille, qui y avait toujours fait beaucoup de bien, ainsi que mon père ; il avait gagné l'affection des habitants, qu'il faisait travailler, et qui dépendaient encore de lui comme ouvriers ; aussi nous vivions en paix.

Mes parents avaient arrangé pour moi un excellent mariage que les troubles de la révolution avaient retardé : mais ils se rappelaient l'inclination mutuelle que M. de Lescure et moi avions montrée dès notre enfance. Les raisons qui avaient fait rompre l'ancien projet n'existaient plus : mon cousin avait presque achevé de payer les dettes de son père. Il jouissait de plus de trente mille livres de rente, et sa grand-mère devait lui en laisser cinquante mille au moins.

7. Explain the use of the Subjunctive in the following instances, rendering each sentence into French :—

I do not think he will come to-day.
 Whatever he says I will not go.
 Though his reasons were good, I would not listen to them.
 I wonder you have written to her.
 It is just that the laws should be observed.
 He must be obliging, polite, and affable.
 It is not likely that they will return before next year.
 Has the tailor sent me my coat? Not that I know of.
 I was very much afraid he would tell her mother of it.
 There is no grief but time at length alleviates.

8. Mention words whose sound is like, but whose signification is different from, the following :—

Voler, Saint, Mois, Cuire, Boite, Verre, Goute, Fumes, Jeune, Sans, Dont, Pecher.

Give the English of each.

9. When do the following verbs require the preposition *de* and when the preposition *à* after them :—

To begin—*commencer*. To continue—*continuer*. To fail—*manquer*. To resolve—*résoudre*.

10. Before what words is the Article omitted.

History and Geography.

THURSDAY, 11TH SEPTEMBER, 1862. 2 to 5 P.M.

1. From what facts is it inferred that the Earth is spherical?
 2. What is the greatest depth ever sounded in the ocean? And where was it found?
 3. State the number of square miles in Europe, Asia, Australia, and the length of the coast line of each.
 4. What are Latitude and Longitude? Give, as nearly as you can, the Latitude and the Longitude of London, Calcutta, Hobart Town, Cape Horn, New York, Singapore.
 5. What are the principal permanent, and the principal periodic winds? Give their localities and their character.
 6. In what ranges are the following mountains, and what is the height of each:—Mont Blanc, Chimborazo, Snaehattan, the Brocken, Gebel Mousa, Kosciusko?
 7. Through what districts do the following rivers run, and to what larger rivers are they severally tributaries:—Adda, Till, Mayn, Wye, Aube, Darling?
 8. Where, and what, are La Plata, Mowna Roa, Salsette, Valdai, Havanna, Ceuta?
 9. What, and where, are the chief seaports of Russia, and what are its principal exports?
 10. What are the following articles of commerce, and where are they produced:—Coffee, Raisins, Opal, Pepper, Tobacco, Rice?
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11. For what two events in what years was St. Bartholomew's Day remarkable?
 12. Give some account, with dates, of the life and death of Mary, Queen of Scots.
 13. What causes led to the "Great Rebellion?"
 14. What were the principal battles fought between the Army of the King and that of the Parliament? State in what part of Great Britain they were fought.
 15. How, when, and why did the following persons die:—Sir Philip Sydney, Raleigh, De Witt, Sir Thomas Overbury, Hampden, Lord Stafford?
 16. Sketch briefly, with dates, the career of Wolsey.
 17. What was the Armada? Who sent it forth, and why? Give a brief account of its success.
 18. Who was the author of the *Habeas Corpus* Act, and in what year did it pass?
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English Language.

FRIDAY, 12TH SEPTEMBER, 1862. 8 A.M. to 11 A.M.

1. Define the following terms :—Etymology, a Syllable, an Interjection.
 2. Classify the Adverbs, giving one or more specimens of each class.
 3. Give specimens, varying in termination, of nouns denoting abstract ideas ; viz.,—three of Saxon origin, three of Latin or French origin, and two of Greek origin.
 4. Explain what is meant by a Simple Sentence, and what by a Compound Sentence, giving an example of each.
 5. State the fundamental laws of Syntax common to English with other languages.
 6. Analyse the following sentence :—

“ To have a true relish and form a right judgment of a description, a man should be born with a good imagination, and must have well weighed the force and energy that lie in the several words of a language, so as to be able to distinguish which are most significant and expressive of their proper ideas, and what additional strength and beauty they are capable of receiving from conjunction with others.”
 7. Trace briefly the history of the language. Also, state, and show by examples, whence its forms of inflection are derived, and to what origin it owes most of its words now in use.
 8. Give instances of words still in use which illustrate the relation in which the Saxon and Norman occupants of England stood to one another.
 9. Give five instances of words which attest in a striking manner some moral truth ; showing how they do so in each case.
 10. Specify, with a short explanation in each instance, five words recalling, and seeming to imply, some superstition or belief now obsolete.
 11. Distinguish the meaning of the following words :—*genuine*, as compared with *authentic* ; *discovery* with *invention* ; *apprehend* with *comprehend* ; *education* with *instruction*.
 12. Trace the origin and meaning of these words :—assiduous, calamity, conscience, wrong, villain, trivial, sarcasm, subtle, sincere, plausible, poltroon, tawdry.
 13. Compose a short essay on the following subject :—A comparison of the life of savages with that of civilized men.
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Greek.—I.

FRIDAY, 12TH SEPTEMBER, 1862. 11.30 A.M. to 2 P.M.

[In order to pass in Greek it will be deemed indispensable that Candidates shall have answered Questions 1. 2. 3. 4. 5. to the satisfaction of the Examiners.]

1. In what way are the degrees of comparison of adjectives and adverbs formed in Greek? Write down the comparative and superlative of γλυκύς, δεινός, εὐτυχής. Also of γέρον, τάχα, ἀγαθός.
2. Write down throughout the 2 aor. opt. pass. of τύπτω, the 1 aor. imp. mid. of πράσσω, the imp. ind. act. of φιλέω, and the perf. opt. pass. of βουλεύω.
3. Decline ὥδεις, μγείς, κρείσσω, οὔτος, ποιητής, λαγώς.
4. Give the principal parts (i.e. the fut., perfects active and passive, 2 aor. act. or 1st aor. pass.) of πάσχω, ἔχω, πέμπω, πίπτω, σημαίνω, λαμβάνω.
5. Translate literally,—

πότερα μαχούμεθ', ἢ φιλοψυχήσομεν,
τὸν καθανόνθ' ὀρώντες οὐ τιμώμενον;
καὶ μὴν ἔμοιγε ζῶντι μὲν καθ' ἡμέραν,
κεῖ σμίκρ' ἔχοιμι, πάντ' ἂν ἀρκούντως ἔχοι·
τύμβον δὲ βουλοίμην ἂν ἀξιούμενον
τὸν ἐμὸν ὁρᾶσθαι· διὰ μακροῦ γὰρ ἡ χάρις·
εἰ δ' οἰκτρὰ πάσχειν φῆς, τὰδ' ἀντάκουέ μου·
εἰσὶν παρ' ἡμῖν οὐδὲν ἥσσον ἄθλῳ·
γραῖται γυναῖκες ἡδὲ πρεσβῦται σέθεν,
νύμφαι τ' ἀρίστων νυμφίων τητῶμεναι,
ὧν ἡδὲ κεύθει σώματ' Ἰδαία κόνις.

6. Distinguish, according to their accent and breathing, the following words:—αγων, αλλα, αυτη, φως, η, ου, θεων, εγειραι.

7. Translate,—

ΠΟΛΥΜ. μάλιστα· τοῦκείνου μὲν εὐτυχεῖς μέρος·
ΕΚ. ὦ φίλταθ', ὡς εὖ καξίως σέθεν λέγεις.
ΠΟΛΥΜ. τί δῆτα βούλει δεύτερον μαθεῖν ἐμοῦ;
ΕΚ. εἰ τῆς τεκούσης τῆσδε μέμνηταί τί μου.
ΠΟΛΥΜ. καὶ δεῦρό γ' ὡς σὲ κρύφιος ἐζήτει μολεῖν.
ΕΚ. χρυσὸς δὲ σῶς, δν ἦλθεν ἐκ Τροίας ἔχων;
ΠΟΛΥΜ. σῶς, ἐν δόμοις γε τοῖς ἐμοῖς φρουρούμενος·
ΕΚ. σῶσόν νυν αὐτόν, μηδ' ἔρα τῶν πλησίων.
ΠΟΛΥΜ. ἤκιστ'· ὀναίμην τοῦ παρόντος, ὦ γύναι.
ΕΚ. οἶσθ' οὖν ἃ λέξαι σοί τε καὶ παισὶν θέλω;
ΠΟΛΥΜ. οὐκ οἶδα· τῷ σὺ τοῦτο σημανεῖς λόγῳ.
ΕΚ. ἔστ', ὦ φιληθεῖς ὡς σὺ νῦν ἐμοὶ φιλεῖ,
ΠΟΛΥΜ. τί χρῆμ', δ κάμῃ καὶ τέκν' εἰδέναι χρεών;
ΕΚ. χρυσοῦ παλαιὰ Πριαμίδων κατῶρυχες.

8. In the above passage why is μέρος (line 1) accusative? ἐμοῦ (line 3) genitive? λόγῳ (line 11) dative? σὲ (line 5) accusative?

9. Translate,—

Οὐδὲ σέθεν, Μενέλαε, θεοὶ μάκαρες λελάθοντο
Ἀθάνατοι, πρώτη δὲ Διὸς θυγάτηρ ἀγελείη,
Ἥ τοι πρόσθε στάσα βέλος ἐχεπευκὲς ἄμυνεν.
Ἥ δὲ τόσον μὲν ἔργον ἀπὸ χροῶς, ὡς ὅτε μήτηρ
Παιδὸς ἐργῇ μυῖαν, ὅθ' ἡδέϊ λέξεται ὑπνῳ·
Αὐτὴ δ' αὐτ' ἴθυνεν ὅθι ζωστήρος ὀχῆες
Χρῦσειοι σύνεχον καὶ διπλὸς ἦν τετο θώρηξ.
Ἐν δ' ἔπεσε ζωστήρι ἀρηρότι πικρὸς οἰστός·
Διὰ μὲν ἄρ' ζωστήρος ἐλήλατο δαιδαλέοιο,
Καὶ διὰ θώρηκος πολυδαιδάλου ἡρήριστο
Μίτρης θ', ἣν ἐφόρει ἔρυμα χροῶς, ἔρκος ἀκόντων,
Ἥ οἱ πλείστον ἔρυντο· διαπρὸ δὲ εἶσατο καὶ τῆς.
Ἀκρότατον δ' ἄρ' οἰστός ἐπέγραψε χροά φωτός·
Αὐτίκα δ' ἔρρεεν αἷμα κελαινεφές ἐξ ὠτειλῆς.

10. Give the equivalent Attic form of the following Homeric words :—ἐπέπιθμεν, κονίησι, στέρνοιο, ἐστήκει, πολέες, ἐπιπροέμεν.
11. Derive and explain the following words :—ἀγκυλομήτω, φάρετρα, κεραόζοος, ἀτασθαλίη, νεοσφαγής, χαρακτήρ, δημοχαριστής, φροῦδος.
12. Explain the terms Tmesis and Attraction; and quote from your^{or} Hecuba or Homer, or construct, an example of each.

Greek.—II.

FRIDAY, 12TH SEPTEMBER, 1862. 3 P.M. to 5.30 P.M.

[In order to pass, it will be deemed indispensable that Candidates shall have answered the Questions 1, 2, 3, and 4 to the satisfaction of the Examiners.]

1. Write the mute consonants, and classify them according to the organs of Speech.
2. Decline ὅστις, οὗ, μέγας, ἄσπις, τυπείς.
3. Decline the pres. indic. of εἶμι, and the same tense of εἶμι; the 1 aor. opt. pass. of πράττω, and the perf. indic. act. of δίδωμι.
4. Translate literally—

Ἐδόκει δὴ τοῖς στρατηγοῖς οὐκ ἀσφαλὲς εἶναι διασκηνοῦν, ἀλλὰ συναγαγεῖν τὸ στράτευμα πάλιν. Εντεύθεν συνῆλθον· καὶ γὰρ ἐδόκει διαθριάζειν. Νυκτερευόντων δ' αὐτῶν ἐνταῦθα ἐπιπίπτει χιὼν ἄπλετος, ὥστε ἀπέκρυψε καὶ τὰ ὄπλα καὶ τοὺς ἀνθρώπους κατακειμένους· καὶ τὰ ὑποζύγια συνεπέδησεν ἡ χιὼν· καὶ πολλὸς ὄκνος ἦν ἀνίστασθαι· κατακειμένων γὰρ ἀλεινὸν ἦν ἡ χιὼν ἐπιπεπτωκυῖα, ὅτω μὴ παραρρύνει.

Parse ὅτω and παραρρύνει.

5. Translate—

Ἐνθα δὴ Πολυκράτης Ἀθηναῖος, λοχαγός, ἐκέλευσεν ἀφίεναι ἑαυτόν· καὶ λαβὼν τοὺς εὐζώνους θέων ἐπὶ τὴν κώμην ἣν εἰλήχει Ξενοφῶν καταλαμβάνει πάντας ἔνδον τοὺς κωμήτας καὶ τὸν κωμάρχην, καὶ πῶλους εἰς δασμὸν βασιλεῖ τρεφομένους ἑπτακαίδεκα καὶ τὴν θυγατέρα τοῦ κωμάρχου ἐννάτην ἡμέραν γεγαμημένην· ὃς ἀνὴρ αὐτῆς λαγῶς ὥχετο θηράσων καὶ οὐχ ἥλω ἐν ταῖς κώμαις. Αἱ δ' οἰκίαι ἦσαν κατάγειοι, τὸ μὲν στόμα ὥσπερ φρέατος, κάτω δ' εὐρέϊαι· αἱ δὲ εἰσοδοὶ τοῖς μὲν ὑποζυγίοις ὀρυκταί, οἱ δὲ ἄνθρωποι κατέβαινον κατὰ κλίμακος.

Parse θέων, ἥλω, γεγαμημένην. Distinguish οὐ and μὴ.

6. Translate—

Χωρὶς δὲ τῆς δόξης, ὧ ἄνδρες, οὐδὲ δίκαιόν μοι δοκεῖ εἶναι δεῖσθαι τοῦ δικαστοῦ οὐδὲ δεόμενον ἀποφεύγειν, ἀλλὰ διδάσκειν καὶ πείθειν. Οὐ γὰρ ἐπὶ τούτῳ κáθηται ὁ δικαστής, ἐπὶ τῷ καταχαρίζεσθαι τὰ δίκαια, ἀλλ' ἐπὶ τῷ κρίνειν ταῦτα· καὶ ὁμῶμοκεν οὐ χαριεῖσθαι οἷς ἂν δοκῇ αὐτῷ, ἀλλὰ δικάσειν κατὰ τοὺς νόμους. Οὐκ οὖν χρὴ οὔτε ἡμᾶς ἐθίζειν ὑμᾶς ἐπιπορκεῖν, οὐθ' ὑμᾶς ἐθίζεσθαι· οὐδέτεροι γὰρ ἂν ἡμῶν εὐσεβοῖεν.

7. Translate the following into Attic Greek :—

Some things are in our power, others not. They were marching the whole of the following day through snow. On account of these hardships many of the soldiers were left behind. I don't know what to do with the boy. This was done that the enemy might not ravage the island.

8. What is the modern name of the Καρδοῦχοι, and of their country? Trace the course of the Rivers Tigris and Phasis. Give the modern name of the latter, and the English derivative from its ancient name. State accurately the position of Trapezus, Sinope, and Crete, giving the modern name of each.

Geology.

SATURDAY, 13TH SEPTEMBER, 1862. 8.30 A.M. to 11 A.M.

1. Give a short sketch of the principal results of Geological investigation.
2. Describe the principal causes of the formation and destruction of rocks.
3. How do you account for the existence of hot springs? Mention any observed facts supporting your explanation.
4. Is there any clue to the depth of the seas in which different formations have been deposited?
5. Define the terms 'outcrop,' 'strike,' 'unconformable.'
6. Draw a section of beds, affected by an anticlinal axis and a fault.
7. Explain the terms 'structure,' 'stratum,' 'foliation,' and 'cleavage,' as applied to rocks.
8. How is the hardness of minerals estimated? Mention the most important simple minerals entering into the composition of rocks.
9. Give the composition of marble, gypsum, and graphite.
10. How would you proceed to determine the age of any set of rocks?
11. Mention the principal association of Granitic, Trappean, and Volcanic rocks, and their more important industrial products.
12. What do you mean by the Metamorphism of Rocks?
13. Enumerate, in ascending order, the various Palæozoic systems, and mention a few genera of fossils characteristic of each.
14. Explain the formation of Rock Salt.
15. Contrast the vegetation of the Carboniferous and Oolitic Periods.
16. Give the lithological characters of the principal sub-divisions of the Cretaceous System, and discuss briefly the origin of Chalk.
17. Give a short account of the Glacial Drift.
18. Name the accompanying specimens.

Drawing and Architecture.

SATURDAY, 13TH SEPTEMBER, 1862. 8½ A.M. to 9½ A.M.

1. Name the characteristic differences between a Doric, an Ionic, and a Corinthian Capital.
2. What other Orders in Architecture than the three named are there, and how are they distinguished?
3. Upon what are the Greeks supposed to have based the shape and proportions of their Columns?
4. What difference is there in the profiles of Grecian and Roman mouldings?
5. Give Sections of the following (Roman):—The Ovolo, Cavetto, and Torus.
6. To what style of Architecture is the Dome peculiar? And give one or two celebrated examples.
7. What may be said to form the leading feature in Roman Architecture?
8. Mention some of the great Architectural works attributed to Michael Angelo.
9. What is Gothic Architecture? And state some of its leading characteristics.

Drawing and Architecture.

SATURDAY, 13TH SEPTEMBER, 1862. 9½ A.M. to 11 A.M.

Draw, to a scale of four feet to an inch, a Plan and Elevation of a Stable, and Coach-house attached. Interior size of each apartment to be 14 feet wide and 10 feet long, having a division wall 9 inches thick, a door in front of Stable sufficiently large for the admission of a horse, and a small window on one side. Coach-house to have a pair of folding doors large enough for the purpose required, but no other opening except a doorway in the division wall communicating with stable. The walls to be of stone, 18 inches in thickness, to show on elevation 9 feet high to the eave; height from the eave to ridge of roof to be 6 feet.

SATURDAY, 13TH SEPTEMBER, 1862. 11½ A.M. to 1 P.M.

1. What difference is there between Geometrical and Perspective Drawing?
2. Explain the terms 'picture plane,' 'ground plane,' 'station point,' 'perspective centre,' 'line of direction,' 'vanishing point,' and 'horizontal line.'
3. To what lines is the 'perspective centre' the vanishing point?
4. What direction do parallel lines take in perspective?
5. What are shadows? And explain, in connection therewith, the number and kinds of luminaries.
6. What is meant by the 'shadow plane'?
7. In what form do rays of light proceed?
8. Which is the darker—the shadow of an object, or that portion of the object in shade? Explain the reason why.

[The following Problem must be attempted by each Candidate.]

9. Put into perspective, (and leave all lines showing the method,) a cube of 4 feet, as seen directly in front, one of its sides resting on the 'ground line' and touching the 'picture plane'; the base of the cube to be 5 feet below the eye, and all edges to be drawn as if the cube were transparent. Distance, 8 feet; scale, ½ inch to a foot.

[FROM THE FLAT.]

SATURDAY, 13TH SEPTEMBER, 1862. 1 P.M. to 2 P.M.

Copy, in outline only, the object set before you.

No means of measurement will be allowed, and the drawing to be made with pen and ink, *without* the use of a pencil.

[FROM MODEL.]

SATURDAY, 13TH SEPTEMBER, 1862. 3 P.M. to 4½ P.M.

Sketch carefully, and shade in Indian ink, the Model given.

[FROM MEMORY.]

SATURDAY, 13TH SEPTEMBER, 1862. 4½ P.M. to 5½ P.M.

Make a careful sketch, from memory, of a small square table, with four plain and straight legs, having on its top a lady's work-box, (the lid closed): the eye of the draughtsman supposed to be on a level with the top of the work-box.