29-1-12
9·2·14

Educational (1888) Department.

ORDINARY MS.

G.O., No. 279

Dated 29 4 88

15
29/4

INDEXED. 37-87

[Despatch Abstract.]

Comm[unicate] to the D.P.I. for report, letter forwarding, for information, copy of despatch from the Secy of State on the subject of the extension to India of the system of examinations of the Society of Arts, London

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C.N.	647/98						

[Edl. 5]
1,000—5-3-97.

Educational (1898) Department.

CURRENT No. 534

Secy/A

From

Order W. 279 & 294-98 The Govt of India. (H. D.)

The letter with its enclosures will be ~~forwarded~~ communicated to the D.P.I. for report.

H.T. 27/4/98

No. 93

Dated	13th	April, 1898.
Received	20th	.. ..
Registered	22nd	.. ..
Enclosures	3	
Spare copies.		

SUBJECT.

Forwarding a copy of a Despatch from the Secy of State as regards the subject of the Extension of the system of the Examns of the Society of Arts London & Enquiring whether any demand to the Extension of these Examns in India exists.

23/4/98

Copies sent 30/4

To The D.P.I. & Co
with 4 spare copies of correspondence
& 3 of programme

Desp 2.5.98

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

INDIA OFFICE;

London, 18th November 1897.

Public (Educational).
No. 129.

To His Excellency the Right Honourable the GOVERNOR GENERAL of India in Council.

MY LORD,

I forward, for the consideration of Your Excellency's Government, a letter* from the Society of Arts on the subject of the extension of the system of the Society's examinations to India. I shall be glad to be informed in due course whether a demand exists to an extent which would justify your Government in encouraging the Society to carry out their proposal.

* Dated 19th October 1897, with accompaniments.

I have the honour to be,

MY LORD,

Your Lordship's most obedient, humble Servant,

GEORGE HAMILTON.

G. C. Press, Simla.—No. 68 H. D.—[illegible]—9

Dated London, W. C., the 19th October 1897.

From—H. T. WOOD, Esq., Secretary to the Society of Arts, London,

To—The Under-Secretary of State for India.

At various times the Council of the Society of Arts have had before them applications from Educational Institutions in the Colonies, asking whether the system of the Society's examinations could not be extended beyond the limits of the United Kingdom, and they have also had one or two similar applications from India. The Council have never seen their way to undertake the organization of the system of examinations at so great a distance from London, on account of the obvious difficulties of considerable extent which such an extension of the organization would involve. They would, however, be prepared to consider the arrangements necessary for the purpose, if they could be assured there existed a real demand for examinations of this sort.

They have therefore instructed me to apply to you, and to ask you kindly to cause inquiry to be made as to the possibility of organizing such examinations, through the Educational Institutions in India, in the same way as they are organized through Institutions in this country, and also as to the demand which may exist in India for such examinations.

Unless such a demand can be shown to exist, and unless a sufficient number of local examination centres can be established, the Council do not think that much advantage would be gained by endeavouring to extend the Society's system to India, but they are prepared to make the attempt if they can do so with any prospect of serving a useful purpose.

I send for your information a programme of the examinations, together with a report on the results of those held last year.

Edcn 8
2
534

G. C. Press, Simla.—No. 68 H. D.—94-98.—0

CURRENT No. 534

No. 93

FROM

H. LUSON, ESQ.,
Deputy Secretary to the Government of India,

TO

The Chief Secy to the Govt. of Madras.

CHIEF SECRETARY
20 APR. 1898
GOVERNMENT OF MADRAS

Home Department
Education.

Simla, the 13th April 1898.

SIR,

I AM directed to forward, for the information of the Governor in Council,

* No. 129 Public (Educational), dated 18th November 1897, and enclosures (except results of examinations).

a copy of a Despatch* from the Secretary of State giving cover to a letter from the Secretary to the Society of Arts, London, on the subject of the extension of the system of the Society's examinations to India, and to request that it may be ascertained and reported to the Government of India whether any demand exists such as to render it desirable to have these examinations extended to India.

I have the honour to be,

SIR,

Your most obedient Servant,

H. Luson.

Deputy Secy. to the Govt. of India.

I S.C. of cancel
with Professional
next packet post

1898
Educl. Dept.
Enclos. No. 1
To
G. No. 534

When given for copying 2/4
When copied _____
When examined _____
When signed _____ } 189 .

READ AGAIN G.O., No. , DATED
189 ,

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT	A	A	A	A	A	A	A	
LETTER OF GOVERNMENT.								
STATEMENT WITH DITTO.								
PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.								

N.B.—

A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.

8
294
3

PRICE 3D., POST FREE.

534



Society for the Encouragement of Arts, Manufactures, and Commerce,

JOHN STREET, ADELPHI, LONDON, W.C.

CHIEF SECRETARY'S OFFICE
20 APR. 1893
GOVERNMENT OF MADRAS

PROGRAMME

OF

THE SOCIETY'S EXAMINATIONS

FOR

1898,

With an Appendix containing the Examination Papers of 1897.

LONDON:
PUBLISHED BY GEORGE BELL & SONS, 4, YORK STREET, COVENT GARDEN, W.C.

1897.

Society for the Encouragement of Arts, Manufactures, and Commerce,

JOHN STREET, ADELPHI, LONDON, W.C.

PROGRAMME OF EXAMINATIONS

FOR 1898.

List of the Council and Officers for the 144th Session, 1897-8.

Council.

H.R.H. THE PRINCE OF WALES, K.G., *President of the Society.*

MAJOR-GENERAL SIR OWEN TUDOR BURNE, G.C.I.E., K.C.S.I., *Chairman of the Council.*

H.R.H. THE DUKE OF SAXE COBURG GOTHA, K.G., *Vice-Pres.*
H.R.H. THE DUKE OF YORK, K.G., *Vice-Pres.*
SIR FREDERICK ABEL, Bart., K.C.B., D.C.L., F.R.S., *Vice-Pres.*
DUKE OF ABERCORN, K.G., C.B., *Vice-Pres.*
CAPTAIN W. DE W. ABNEY, R.E., C.B., F.R.S., *Vice-Pres.*
SIR WILLIAM ANDERSON, C.B., D.C.L., F.R.S., *Vice-Pres.*
THE ATTORNEY-GENERAL, Q.C.M.G., Q.C., M.P., *Vice-Pres.*
SIR STEUART COLVIN BAYLEY, K.C.S.I., C.I.E.
LORD BELHAVEN AND STENTON.
SIR GEORGE BIRDWOOD, K.C.I.E., C.S.I., LL.D., M.D., *Vice-Pres.*
SIR EDWARD BIRKBECK, Bart., *Vice-Pres.*
SIR COURTENAY BOYLE, K.C.B., *Vice-Pres.*
SIR FREDERICK BRAMWELL, Bart., D.C.L., F.R.S., *Vice-Pres.*
MICHAEL CARTEIGHE.
B. FRANCIS COBB, *Treasurer.*
RIGHT HON. VISCOUNT CROSS, G.C.B., *Vice-Pres.*
RIGHT HON. GEORGE N. CURZON, M.P., *Vice-Pres.*
LEWIS FOREMAN DAY.
MAJOR-GEN. SIR JOHN F. D. DONNELLY, K.C.B., *Vice-Pres.*
HON. SIR CHARLES W. FREMANTLE, K.C.B., *Vice-Pres.*
SIR DOUGLAS GALTON, K.C.B., D.C.L., F.R.S., *Vice-Pres.*
JOSEPH G. GORDON.
THE LORD CHANCELLOR, *Vice-Pres.*
HENRY GRAHAM HARRIS.
SIR VILLIERS LISTER, K.C.M.G., *Vice-Pres.*
JAMES SEWELL NEVILLE.
WILLIAM HENRY PREECE, C.B., F.R.S., *Vice-Pres.*
SIR OWEN ROBERTS, M.A., D.C.L., F.S.A., *Treasurer.*
PROFESSOR WILLIAM CHANDLER ROBERTS-AUSTEN, C.B., F.R.S., *Vice-Pres.*
EARL OF ROSEBERY, K.G., K.T., *Vice-Pres.*
ALEXANDER SIEMENS.
SIR DONALD A. SMITH, G.C.M.G., LL.D., *Vice-Pres.*
SIR DOUGLAS STRAIGHT.
WILLIAM LUSON THOMAS.
PROF. JOHN MILLAR THOMSON, F.R.S.

Secretary.

SIR HENRY TRUEMAN WOOD, M.A.

Assistant-Secretary.	Accountant.	Auditors.
HENRY B. WHEATLEY, F.S.A.	HOWARD H. ROOM.	J. O. CHADWICK AND CO.

CONTENTS.

	PAGE
List of Examination Subjects	5
General Rules	6
Syllabuses of Subjects for 1898	8
Arithmetic	8
English	8
Book-keeping	9
Commercial Geography	9
Shorthand	9
Type-writing	10
Economics	10
Précis-writing	10
French	11
Elementary French	11
German	11
Elementary German	12
Italian	12
Spanish	12
Elementary Spanish	12
Portuguese	12
Russian	12
Danish	13
Chinese	13
Japanese	13
Domestic Economy	13
Rudiments of Music	13
Harmony	14
Practice of Music	14
Time Table for 1898	17
Prizes	17
Examination Committees	18
Questions for 1897 (with Examiners' Reports)	23
Arithmetic	23
English	25
Book-keeping	26
Commercial Geography	27
Shorthand	28
Type-writing	31, 32, 33
Economics	31
Précis-writing	31
French	34
Elementary French	36
German	37
Elementary German	40
Italian	41
Spanish	42
Elementary Spanish	44
Portuguese	44
Russian	45
Danish	45
Chinese	46
Japanese	46
Domestic Economy	46
Rudiments of Music	47
Harmony	51
Sir H. Trueman Wood's Paper on the Society of Arts Examinations, read before the International Congress on Technical Education, June, 1897	55

SOCIETY OF ARTS EXAMINATIONS.

PROGRAMME FOR 1898.

SUBJECTS.

The subjects of Examinations held at the various centres (for each of which separate certificates will be granted) are—

1. Arithmetic.
2. English.
3. Book-keeping.
4. Commercial Geography.
5. Shorthand.
6. Type-writing.
7. Economics.
8. Précis-writing.
9. French.
10. Elementary French.
11. German.
12. Elementary German.
13. Italian.
14. Spanish.
15. Elementary Spanish.
16. Portuguese.
17. Russian.
18. Danish.
19. Chinese.
20. Japanese.
21. Domestic Economy.
22. Rudiments of Music.
23. Harmony.
24. Practice of Music

GENERAL RULES.

1. No Examination will be held in any subject for which less than 25 candidates, in the aggregate, offer themselves.* When the returns referred to in par. 12 are received *on the 2nd March*, should it be found that there are less than 25 candidates in any subject, and that in consequence it has been decided not to hold an examination in such subject, intimation to that effect will at once be given to those Committees concerned, and the fees will be returned.

2. First, Second, and Third-class Certificates will be granted in each subject, with the exception of Music. The minimum per-centage of marks for these classes is 75, 50, and 30 respectively. In the Elementary Examinations in French, German, and Spanish there will only be certificates of one class. Medals and Prizes will also be given under the conditions set forth on page 17. For particulars as to Music see pages 13 to 16.

3. A fee of 2s. 6d. will be required by the Society from each candidate in each subject, except "Practice of Music," for which special fees are required (see page 14). To ensure that candidates who give in their names shall come up for examination, Secretaries of Committees should require the fee to be paid on registration of the name. No fees can be returned, except under the circumstances referred to in Rule 1.

4. Examination Committees may also charge a fee for working expenses. It is hoped that this will be fixed at as low a rate as possible, so as not to be prohibitory.

5. Candidates of any age may be examined.

6. The Examinations will be held at any place in the United Kingdom where an Examination Committee is willing to undertake the necessary arrangements. The Committee of any Science or Art School under the Science and Art Department, or the Technical Instruction Committee of any County or Borough Council, or any School Board, will be accepted as a suitable Committee. In any places where no such Committee exists, a Committee, such as is described below, may be formed for the purpose. It is desirable to avoid the multiplication of examination committees in the same locality. Where several independent teaching institutions exist in one neighbourhood, it is suggested that they should combine to form a single joint committee for examination purposes. The certificates issued state the place of examination, but give no reference to the place where the candidates have received instruction.

7. Each Committee must consist of at least three members, and must have, in addition, a Chairman and a Secretary. It is desirable to have a larger Committee when there are many candidates. The district for which the Committee is to act should be clearly defined, and its composition must be such as to command the respect and confidence of the neighbourhood. No member or officer of a Committee can be admitted to examination.

8. A list of the members of the Committee should be submitted to the Council of the Society of Arts with the application for the examination papers. A member of the Committee must be selected to receive the sealed packets of examination papers. No teacher at an institution or school where the examination is held can serve in this capacity, and it is strongly recommended that some member of Committee should be chosen who has no official connection with the work at the centre of examination.

9. For a list of Committees in connection with the Society, see page 18. Any one desiring to be examined should apply to the Secretary of one of these Committees, or to the Secretary of any such Committees as are named in paragraph 6, for permission to attend there for examination. It should be clearly understood that the Council of the Society cannot exercise any control over the Committees with regard to the admission of candidates. With the exception of the Practical Examination in Music, no Examination is held at the House of the Society of Arts.

10. The Society cannot undertake to arrange for the examination of any candidate, and no application can be recognised unless sent in through a Committee.

11. The Examinations, with the exception of that for Practice of Music, will be held on the evenings of Monday, 21st March, Tuesday, 22nd March, Wednesday, 23rd March, and Thursday, 24th March. The examinations (with the exception of Shorthand, Type-writing, and Rudiments of Music) will last for three hours, viz., from 7 until 10 o'clock. The Shorthand and Type-writing examinations will be held from 7.30 to 10 o'clock, and the examination in Rudiments of Music from 7 to 9 o'clock. Candidates may take one subject only on each evening. The examinations in the Practice of Music will commence on the 27th June.

12. Forms for application for examination papers will be sent to the various centres on or before the 21st February. The returns must reach the Society not later than Wednesday, the 2nd March. Under no consideration will any application be entertained after that date.

13. In accordance with the above returns, papers will be despatched in sealed envelopes, which should only be opened when the candidates are assembled for examination, and in their presence. Candidates should be in their places at least five minutes before the examination commences, and no candidate can be admitted after the time fixed for the commencement. Candidates arriving late will not only be excluded, but will also forfeit their fees. It is therefore desirable that this fact should be notified to the candidates by the Committees at the various centres before the day of examination.

14. Two members of the Committee, at least, must be present during the hours of examination, and state upon a form of declaration that the Society's conditions have been strictly complied with. The members can attend in relays, if more convenient; but the candidates must never be left with only one superintendent. The rule rendering it necessary for one member to remain during the entire sitting is rescinded. No person who has given instruction to any of the candidates in any subject of examination can serve in this capacity. In the Shorthand Examination, if the Committee deem it desirable, the teacher of the Class may dictate the passages, but he must quit the room directly the dictation is finished.

* This means 25 candidates throughout the whole kingdom, not 25 candidates at any one centre.

15. Numbered writing paper will be forwarded for the use of the candidates, and particulars of name, age, subject, &c., will have to be filled in upon the outer sheet. It will be the duty of the Committee to see that the particulars required are duly and correctly filled in. In Music, the answers have to be written on the paper containing the questions, to which the usual outside sheet will be attached. Working paper will not, therefore, be sent for the candidates in that subject. Special paper will be sent for candidates in Book-keeping, Type-writing, and Précis-writing, and care should be taken that the proper kind of paper is given out for use.

16. The worked papers must be collected, packed up, and despatched (post paid) to the Secretary of the Society of Arts on the night of the examination; or, when the postal arrangements will not permit of this, by the first despatch in the morning. In all cases the papers must be sealed up before the Committee separate. Any deviation from this rule will disqualify the papers.

17. A list of the successful candidates will be printed, and copies for distribution to the candidates will be transmitted to the Secretaries of Committees as soon as possible after the holding of the Examinations.

18. The certificates will be sent to the various Centres of Examination as soon as ready.

19. For the Time-table see page 17.

Under no circumstances can any deviation be made from these rules.

Secretaries of Committees are particularly requested to note that the last day for receiving applications is **WEDNESDAY**, the 2nd **MARCH**, 1898, and after that date none will be received under any circumstances whatever. Application forms from the Provinces should therefore not be posted later than **TUESDAY**, the 1st **MARCH**.

Committees may, however, close their lists at an earlier date if it be found expedient to do so, and are not bound to receive entries after such date; but care should be taken that those interested have proper notice of the fact.

In all cases the fees must accompany the application. Returns giving only approximate numbers or unaccompanied by fees will not be recognised.

The price of the Programme (containing the previous year's papers and the examiners' reports on the work done) is 3d., post-free. A certain number of copies are supplied gratuitously to the Secretaries of Examination Committees These should be kept for reference. Other copies can be had at the above price on application to the Secretary, Sir Henry Trueman Wood, Society of Arts, Adelphi, London, W.C.

The questions for the years 1859 to 1897 inclusive, can be obtained (price 3d each year), with the exception of the years 1860, 1867, 1868, 1872, 1873 1875 1878, 1890, 1891, 1892, 1893, and 1894, which are out of print.

SYLLABUSES OF SUBJECTS FOR 1898.

I.—Arithmetic.
II.—English.
III.—Book-keeping.
IV.—Commercial Geography.
V.—Shorthand.
VI.—Type-writing.
VII.—Economics.
VIII.—Précis-writing.
IX.—French.
X.—Elementary French.
XI.—German.
XII.—Elementary German.
XIII.—Italian.
XIV.—Spanish.
XV.—Elementary Spanish.
XVI.—Portuguese.
XVII.—Russian.
XVIII.—Danish.
XIX.—Chinese.
XX.—Japanese.
XXI.—Domestic Economy.
XXII.—Rudiments of Music.
XXIII.—Harmony.
XXIV.—Practice of Music.

In the following paragraphs will be found brief outlines of the subjects of examination. In many instances the Examiner has set down certain Text-books, but in all cases a candidate may exercise his own judgment as to what Text-book he uses.

I.—Arithmetic.

Examiner.—Professor W. H. H. Hudson, M.A., King's College, London.

1. Whole numbers and Fractions, Vulgar and Decimal, including Circulating Decimals and Approximate Calculations.

Applications of Arithmetic, such as Practice, Percentage, Proportion, Interest, Stocks, Areas, Volumes and any other subjects of Arithmetical Calculation.

2. All candidates are expected to show a knowledge of the principles upon which Arithmetical processes are founded, together with facility in their use. The paper will therefore consist partly of questions on Theory, but also largely of practical problems in Commercial Arithmetic, together with some harder questions to test the more advanced candidates.

3. The Examiner takes into account not merely the correctness of the answers, but also the excellence of the methods by which they are obtained, the clearness of the reasoning and neatness of the working, the whole of which must always be shown. Candidates are required to write down in a legible and orderly manner on their paper, so that the Examiner can read them, all the figures necessary for them to obtain their results, together with a sufficient number of words (in which any usual abbreviations will be allowed) to point out clearly the line of reasoning they adopt. Subsidiary calculations may occasionally be put in the margin when they would otherwise obstruct the continuity of the argument. No attention is paid by the Examiner to answers without intelligible work, nor to replies like "yes" or "no" without any indication of a reason. Reasons and explanations should be given briefly and to the point; candidates should not try to write all they know about the matter, but should answer distinctly the definite question. Full credit is not given for answers, though correct, that are not in the proper form; for instance, a vulgar fraction when a decimal is asked for, two figures such as ·39 when one is required, 25½ when the nearest integer is prescribed. Beginners are recommended to apply the unitary method to questions depending on proportion, whether simple or compound; but those who are capable of condensing the steps need not continue to use this method. More advanced students are expected to have paid attention to the abbreviated methods used for approximate calculations; and all are recommended to learn the reasons for their processes before using the methods themselves, to apply common sense to all questions, and to work through the papers of past years.

4. Text-book: Barnard Smith and Hudson, 1892 (*Macmillan*).

5. The Examiner's reports of the mistakes prevalent in previous years should be referred to, and the hints therein contained should be acted on, so that the same mistakes should not be repeated.

II.—English.

Examiner.—Sir Joshua Fitch, LL.D., late H.M. Inspector of Training Colleges.

1. All candidates will be required to answer questions on the elements of English Grammar, including syntax, and to parse and analyse a piece of English fully and correctly. Each candidate must also write a letter or short essay on a given subject. The writer of the letter should endeavour to say what there is to be said clearly in simple English, without waste of words or fault of grammar.

2. Candidates for a First-class will answer special questions in the section intended for such candidates only. These questions will be on the history of the English Language, on the formation of English words, and the meaning of the more common prefixes and terminations. Each candidate for a First-class will also be expected to paraphrase a prose or poetic passage. The handwriting must be neat and very legible. The paraphrase should be clear and concise, should convey to the reader the whole meaning and substance of the passage; and should be expressed in a few short and exact sentences, that will tell its purport to one who has not read the original.

3. Any good English Grammar in common use may be studied by candidates, and due allowance will be made by the Examiner for the different grammatical systems and technical terms that are adopted in them. Candidates for a First-class are expected to have a fair amount of such knowledge as may be obtained by study of Daniel's "Grammar, History, and Derivation of the English Language;" Professor Meiklejohn's "English Language;" or C. P. Mason's "English Grammar."

III.—Book-keeping by Double Entry.

Examiner.—John Oldfield Chadwick, Fellow of the Institute of Chartered Accountants.

1. Candidates should be prepared to answer questions as to the meaning of mercantile terms, and as to the nature and use of the books usually kept in a merchant's office; to journalise a series of transactions, and, having posted the entries to the ledger, to balance the accounts, to prove the correctness of the postings by a trial balance, and finally, to exhibit an account of profit and loss, and a balance sheet.

2. Text-books. No special system is prescribed, and the following books are only named for the guidance of teachers and students:—Inglis's Book-keeping (*Chambers*). Examination-Questions in Book-keeping by Double Entry, by the Rev. J. Hunter, M.A. (*Longmans*). Hamilton and Ball's Treatise on Book-keeping (*Clarendon Press Series*). Sarll's Double Entry Book-keeping (*Gill*).

IV.—Commercial Geography.

Examiner.—Hugh Robert Mill, D.Sc., F.R.S.E., F.R.G.S.

1. It should be borne in mind that commercial or economic geography can never be satisfactorily studied without a sound knowledge of general geography which underlies it, and deals with the great permanent features of the surface of the Earth's crust; heir adaptability to the purposes of humanity; the uses to which Nature or man has put the surface; climate as determined by latitude, altitude, rainfall, temperature; vegetable and animal life, in their broad characteristics.

2. Geography in its widest sense is the study of the Earth's surface (land and water), its physical features, climates, vegetation, animal life, in their relations to each other, and with special reference to the human communities that live upon that surface.

3. Commercial or economic geography may be defined as the department that deals with the geographical distribution of commercial commodities—chiefly food products, raw material, manufactured goods.

It implies a knowledge of (1) the localities where, and the geographical or local conditions under which, these are produced; quantities available for export; the capacities of new countries, like those of Africa and Australia, for commercial development. (2) The various facilities and hindrances to trade, so far as these are geographical, including such subjects as tariffs, currencies, weights and measures, and other local conditions; political and social characteristics likely to affect trade; communications by land and sea, *i.e.*, transport, telegraphs, postal arrangements. Under this head trade-routes of all kinds are of the first importance; and the conditions which may render them more or less hazardous; the position of ports, harbours, coaling stations, and refuges, have to be considered.

4. The special subject of examination will be the Commercial Geography of Europe. The configuration of Europe so far as regards coast-line and mountain-ranges should be understood, the navigable river-systems and principal canals, and the great lines of railway and important steamer routes should be specially studied. Thorough knowledge will be expected of the form of government, language, coinage, time-standards, and commercial policy of the larger countries. The natural resources, and especially the mineral resources, as related to manufacturing districts require particular attention. The United Kingdom may be included in the examination, but no greater stress will be laid upon it than upon any other country. A few questions will be put on Commercial Geography in general, with regard to such matters as ocean routes, the distribution of commodities, and external trade of the United Kingdom.

Special attention is called to the importance of studying the general geography of Europe on a good map, as there is no other means available for learning the courses of navigable rivers and through railway lines.

The following books will be of service:—Mills' "Elementary Commercial Geography"; Chisholm's "Manual of Commercial Geography"; Keltie's "Statesman's Year-book"; Sime's "Geography of Europe" (*Macmillan's Geographical Series*); "Europe," in Stanford's Compendium of Geography and Travel.

V.—Shorthand.

Examiner.—T. A. Reed.

1. Three passages to be prepared by the Examiner, each occupying seven minutes, will be read to the candidates at the respective rates of 80, 110, and 140 words per minute. These should be taken down in shorthand, as far as possible, *by all the candidates*. The passages must on no account be read twice to the candidates.

2. Each candidate will then transcribe one or more of the passages. A good transcript of the first passage will entitle the candidate to a Third-class certificate; of the second to a Second-class certificate; and of the third to a First-class certificate. *No candidate must begin to transcribe until all the passages have been read, as this would give an unfair advantage to those attempting the first or second portion.*

3. The candidate is recommended, should he transcribe more than one passage, to begin with that representing the class of certificate at which he aims. More credit will be attached to a thoroughly good transcript of one passage than to imperfect transcripts of two or three. The time allowed for transcription will be rather over two hours—sufficient to enable a tolerably expert writer to complete at least two of the passages read.

4. Any candidate for a First-class certificate who fails will be passed Second-class if, in the opinion of the Examiner, his work justifies it; and, similarly, any candidate for Second-class who fails will be passed Third-class under like conditions.

5. Candidates who do not occupy the entire time allowed in transcribing may employ any time that may remain in revising their transcripts; but if they prefer to forego this opportunity they may hand in their transcripts as soon as they are completed, and they will be marked with the time occupied in working them. N.B.—This information must be given on the candidate's working paper, and not on the outside coloured sheet, which does not reach the Examiner.

6. The shorthand notes may be taken with pen or pencil, but the transcripts must be written in ink. Candidates must take the shorthand notes in ordinary note books, or on any similar paper they prefer, which they must themselves provide, and the notes must be attached by a paper fastener to the *under* side of the transcript on the ordinary numbered paper supplied by the Society, and numbered to agree with it.

7. The readers are requested to observe that, in order to insure the various passages being read at the correct rates, each passage will be marked in portions which must occupy a quarter of a minute in reading. They are recommended before the examination to practise reading passages thus divided. Care should be taken in reading to articulate the words very distinctly.

8. The teacher in shorthand at any centre may, if the Committee deem it desirable, dictate the passages to the candidates, but he must quit the room directly he has finished.

9. The examination will include not only speed and accuracy, but spelling, punctuation, and clearness and neatness of writing.

10. Candidates beginning the study of Shorthand are recommended to adopt phonography, but the writers of any system are equally eligible for examination.

VI.—Type-writing.

Examiner.—Mrs. Marshall.

Typing from dictation will be discontinued.

Candidates will be expected to copy passages of varying difficulty, simple literary matter, technical, scientific, &c. For the more difficult subjects a choice of passages may be given. They will also have to copy specifications of electric lighting, architects' or engineers' work, with schedules of quantities and prices, or other tabulated work from MS. copy. They will be expected to transcribe from badly written and confused manuscript. A theory paper will be set in which simple questions must be answered treating of various matters connected with Type-writer copying, and on the mechanical construction of the Type-writer where that bears upon possible accidents and requirements that may occur in the daily work of an office. Candidates will be expected to show a theoretical knowledge of the various duplicating processes.

Credit will be given for neatness, speed (as evidenced by the amount of work properly completed), correct spelling and punctuation, and general intelligence.

The papers given cover the ordinary range of subjects that fall within the province of the typist and correspondence clerk. No candidate should go up for examination whose education is insufficient, mechanical skill in manipulating the keys of the type-writer being useless unless backed up by knowledge and intelligence.

Candidates capable of passing the Society of Arts Shorthand Examination are strongly recommended to try for a certificate in that subject as well as in Type-writing, the two certificates being of service in obtaining employment.

Text-books recommended:—"Practical Handbooks of Type-writing." Nos. 1 and 2. By A. E. Morton (100, *Gracechurch-street, London*). Price 1s. 1d. each, post-free. "Pitman's Manual of the Type-writer," 3s. 6d., "Parkyn's Commercial Handbook of Type-writing," 2s. 6d., and "Greenwood's Commercial Correspondence," as an aid to style and composition. (2, *Amen-corner, E.C.*). 2s. 6d.

[The Local Committees will be expected to make all the necessary arrangements for the supply of instruments, &c., at the centres where the examinations may be held. Candidates will be allowed to use any instrument they choose, and those able to bring their own instruments are recommended to do so.]

VII.—Economics.

Examiner.—W. A. S. Hewins, M.A., Pembroke College, Oxford; Director of the London School of Economics and Political Science; Hunkin Lecturer on Sociology at Manchester College, Oxford; Member of the Council of the British Economic Association; &c.

1. Candidates for this examination are recommended not to attempt too wide a range of reading, but to lay the foundations of a thorough knowledge of the outlines of economic science. They should, therefore, commence with the careful study of J. S. Mill's *Principles of Political Economy*, or F. A. Walker's *Political Economy*, paying special attention to the objects of the science, the meaning of the terms used, such as *wealth, value, utility, cost of production*, &c.; leading principles, such as the law of diminishing returns, and its relation to the Ricardian theory of rent, the principle of population, the division of labour &c.; the theory of value, demand and supply, the relation of cost of production to value; the functions of money and credit; the principles which govern the division of the produce into rent, interest, profits, wages, &c. In the appendices to Walker's *Political Economy*, several subjects, such as the wages fund theory, taxation, pauperism, &c., are discussed. Having mastered the outlines of the science, the candidate will be in a position (*i*) to study other works on general economic theory, such as Henry Sidgwick's *Principles of Political Economy*, and Marshall's *Principles of Economics*, or the same author's *Economics of Industry*; or (ii) to devote special attention to one or more branches of the subject, such as may be studied in Walker's *Wages Question*, and the same author's *Money, Trade, and Industry*, Jevons' *Money*, and the same author's *Investigations in Currency and Finance*, Bagehot's *Lombard Street*, &c.

2. Candidates should also, if possible, acquire some knowledge of (i) the history of economic science, and (ii) the history of English industry and commerce. The first of these subjects may be most usefully studied in Ingram's *History of Political Economy* (a reprint of the article "Political Economy" in the *Encyclopædia Britannica*, 9th edition). For the second subject the candidate may study Cunningham and McArthur's *Outlines of Industrial History*. Other works, involving a much longer course of study, are Ashley's *Economic History*, Vol. I., Parts i. and ii.; Cunningham's *Growth of English Industry and Commerce*, Vol. I.—Early and Middle Ages, Vol. II.—Modern Times; Arnold Toynbee's *Industrial Revolution*; Leone Levi's *History of Commerce*.

3. The paper will include questions intended to test the thoroughness of the candidate's knowledge of the outlines of economic theory. Candidates must satisfy the examiner in these questions in order to obtain a certificate. The paper will also contain more advanced questions. In order to obtain a first-class certificate, candidates must satisfy the examiner in these questions also.

VIII.—Précis-writing.

Examiner.—Stephen Cassan Paul.

Candidates will be furnished with a printed copy of correspondence (usually on some subject of general public interest), and will be required

(1) To make a short Abstract, Schedule, or Docket of the several letters or other papers;

(2) To draw up a Memorandum or Précis, *i.e.*, a brief and clear statement of what passed, not letter by letter, but in the form of a narrative.

No candidate can expect to obtain either a Second-class or a First-class Certificate who does not attempt the Memorandum or Précis as well as the Abstract, and no candidate can expect to obtain a First-class Certificate who does not produce a fairly good Memorandum.

The object of the Abstract, Schedule, or Docket is to serve as an Index. It should contain the date of each letter, the names of the persons by whom and to whom it was written, and, in as few words as possible, the subject of it. The merits of such an Abstract are—(*a*) to give the really important point or points of each letter, omitting everything else; (*b*) to do this briefly; (*c*) distinctly; and (*d*) in such a form as to readily catch the eye.

Clear and neat handwriting, and clearness and conciseness of expression, are essential to success. Specimens of the manner in which the substance of letters should be set forth in an abstract of this kind may be found in the Tables of Contents, which are prefixed to the following Parliamentary publications, viz., "Railways—Workwomen's Trains on the Metropolitan Lines—C. 7657.—1895." Price 2d., and "Africa No. 4, 1895.—C. 7646." Price 3d. These publications may be purchased, either directly or through any bookseller, from Messrs. Eyre and Spottiswoode, East Harding-street, Fleet-street, E.C. Neither of them will be set at the examination.

The object of the Memorandum or Précis—which should be in the shape of a narrative—is to inform anyone who has not time to read the original letters of all the leading features of what transpired as shown by the correspondence. It may be assumed that the person for whose benefit the Précis is prepared has some general knowledge of the subject to which it relates, but that he desires to be reminded of the circumstances which immediately gave rise to the correspondence, and to be put in possession of the salient and material points thereof.

The merits of such a Précis are—(*a*) to contain all that is important in the correspondence, and nothing that is unimportant; (*b*) to present this in a consecutive and readable shape, expressed as distinctly as possible, and as briefly as is compatible with completeness and distinctness.

IX.—French.

Examiner.—Alphonse Mariette, M.A., Fellow and Emeritus Professor of French at King's College, London.

1. The examination paper will include grammatical questions and an extract from a modern French writer, to be translated into English, as also an English extract to be translated into French, and idiomatic and proverbial expressions to be rendered from French into English, and *vice versâ*.

2. In addition to the above, candidates for a First or Second-class certificate will have to translate certain commercial, scientific, and technical expressions and phrases, both English and French, together with some extracts from an original English trade circular or market report, or some other passage of a scientific or technical character, and to write a short letter in French on some given scientific, technical, or commercial subject.

3. Candidates are requested to pay special attention to their French composition.

4. The candidates will be given a choice of passages and subjects of a scientific, technical, and commercial character, in order that they may select whichever they prefer.

5. Books recommended:—Mariette's Half-Hours of French Translation (*Hachette, Paris and London*). Mariette's French Idioms and Proverbs, with historical explanations: Part III. (*Hachette, Paris and London*). Ragon's French Commercial Correspondence (*Hachette, Paris and London*). Elwall's French-English and English-French Dictionary.

X.—Elementary French.

Examiner.—Alphonse Mariette, M.A., Fellow and Emeritus Professor of French at King's College, London.

The examination paper will consist of elementary grammatical questions and an easy extract from some French work for translation into English, together with some simple English sentences to be turned into French.

There will also be a commercial part, consisting of commercial terms of common occurrence to be rendered from French into English and *vice versâ*, and of elementary commercial letters to be translated from either language into the other.

Books recommended:—Mariette's Half-Hours of French Translation (*Hachette, Paris and London*); Cassell's Lessons in French, Part I.; Mariette's French Idioms and Proverbs, first 125 pages of Vol. I. (*Hachette, Paris and London*); Ragon's French Commercial Correspondence (*Hachette, Paris and London*).

*** Certificates of one class only will be given in this subject.

XI.—German.

Examiner.—Dr. Buchheim, Professor of German in King's College, London; Examiner to the Examination Board of Oxford and Cambridge; to the University of New Zealand, and to the College of Preceptors; sometime Examiner to the University of London, &c.

The Paper will contain Questions for Three Classes.

1. The examination paper for Third-class candidates will include questions on German accidence, German and English passages of a general character, and commercial phrases for translation.

2. Candidates for a First or Second-class certificate will have to translate extracts from a German scientific or technical work, or a German commercial report, and they will also be required to translate into English a *fac-simile* German letter on some ordinary subject, to prove their familiarity with German handwriting.

3. Candidates for a Second-class certificate will, besides, have to translate the English passage and one of the general German passages set to candidates for Third-class certificates.

4. Candidates for a First-class certificate will, in addition, have to write an original commercial letter in German, or an original German composition on a general, scientific, or technical subject, and to translate an advanced German passage of a general character.

5. The candidates will be given a choice of passages of a scientific, technical, or commercial character, according to their requirements.

6. No passages will be set for translation from any of the recommended works, which are mentioned, partly to suggest to the candidates what books to read in their preparation for the examination, and partly to indicate, in general, the standard of knowledge required for the various classes respectively.

I. For *Third-class* Candidates:—(*a*) For *Grammatical* Knowledge—Eve's "Shorter German Grammar" (*Nutt*), 2s. (*b*) For Practice in *Composition*—The *Clarendon Press* "Elementary German Prose Composition," with Notes and a Vocabulary, 1s. 6d. (*c*) For *Reading*—Part I. of Buchheim's "Modern German Reader," with Notes and a Vocabulary (*Clarendon Press*), 2s. 6d.

II. For *Second* and *First-class* Candidates:—Part II. of Buchheim's "Modern German Reader," with Notes (*Clarendon Press*), 2s. 6d. The *Clarendon Press* edition of Lessing's Comedy, "Minna von Barnhelm" will be found useful by those who wish to acquire facility in German Conversation.

Candidates for Commercial Certificates are recommended to read the Trade and Market Reports in German newspapers, and to practice the reading of letters written in the German handwriting. Any of the following books will be found useful for Commercial Correspondence:—(*a*) Odermann's "Auswahl deutscher Handelsbriefe," with notes. London: *Siegle*. 1s. 10d. (*b*) Vogel's "German Commercial Correspondence." *Asher and Co.*, 3s.

The following work will be found serviceable for scientific purposes:—"Koppe's *Anfangsgründe der Physik*, &c. Bearbeitet von W. Dahl" (latest edition). Essen. Bädeker. 4s. 10d. Bound.

The finished portion of this paper will be printed in German characters.

XII.—Elementary German.

Examiner.—Dr. Buchheim, Professor of German in King's College, London; Examiner to the Examination Board of Oxford and Cambridge; to the University of New Zealand, and to the College of Preceptors; sometime Examiner to the University of London, &c.

The following subjects will be required for this examination:—

1. Translation of easy German and English passages, or sentences of a general character.

2. Translation of easy German and English commercial terms and phrases.

3. An elementary knowledge of German accidence, such as declension of nouns, adjectives, and pronouns, and conjugation of regular (or "weak") verbs.

The following books will be found useful in the preparation for the above examination:—

(*a.*) For general knowledge:—The *Clarendon Press* edition of Niebuhr's "Heroen-Geschicten" (German type). 2s.

(*b.*) For commercial knowledge:—Odermann's "Auswahl deutscher Handelsbriefe." With Notes. London: *Siegle*. 1s. 10d.

(*c.*) Eve's "Short German Accidence." *Nutt*. 2s.

*** Certificates of one class only will be given in this subject.

XIII.—Italian.

Examiner.—Professor N. Perini, King's College, London; Examiner to the University of London, to the Victoria University, to the Civil Service Commissioners, and to the Royal Military Academy, Woolwich.

1. Candidates should be able (*a*) to translate into English one or more extracts from the works of some Italian historian, moralist, or political economist. (*b.*) To answer questions in Italian grammar. (*c.*) To translate into Italian a passage from an English author. In addition to this, candidates for a First or Second-class certificate will be required (*d*) to turn some commercial, scientific, or technical expressions into their equivalents from Italian into English, and *vice versâ*, also to translate some extracts from an Italian scientific, technical, or commercial work. (*e.*) To write a short letter in Italian on some given subject, showing familiarity with terms and forms used in commercial correspondence.

2. The candidates will be given a choice of passages and subjects of a scientific, technical, and commercial character, in order that they may select whichever they prefer.

Books recommended:—Perini's "Italian Conversation Grammar" (*Hachette and Co.*), and Olivieri's "Italian Commercial Correspondent" (*Asher and Co.*).

XIV.—Spanish.

Examiner.—Professor R. Ramirez, Examiner in Spanish at King's College, London.

1. Candidates will be required (*a*) to show a fair knowledge of Spanish grammar by answering the questions put down for this purpose; (*b*) to translate Spanish and English paragraphs into English and Spanish, respectively. In addition to this, candidates for a First or Second-class certificate will be required (*c*) to render Spanish scientific, technical, and commercial expressions and idioms into English, and from English into Spanish, also to [illegible] some extracts from a Spanish scientific, technical, or commercial work; (*d*) to write an original letter in Spanish on a given scientific, technical, or commercial subject.

2. The candidates will be given a choice of passages and subjects of a scientific, technical, and commercial character, in order that they may select whichever they prefer.

3. Books recommended:—Dann and Gonzales' Spanish Correspondence with English notes; O. Korth, Commercial Grammar (*Crosby Lockwood*); Classiques Espagnols (*Hachette*); Hossfeld's Spanish Grammar and Commercial Correspondent.

XV.—Elementary Spanish.

Examiner.—Professor R. Ramirez, Examiner in Spanish at King's College, London.

Candidates will be required (*a*) to show a fair knowledge of Spanish grammar; (*b*) to translate short sentences from Spanish into English, and English into Spanish; (*c*) to have a knowledge of the terms used in commercial correspondence, by rendering easy Spanish commercial expressions into English, and from English into Spanish.

Books recommended:—O. Korth, Commercial Grammar (*Crosby Lockwood*); Mantilla, Libro de Lectura, No. 3 (*Hachette*).

*** Certificates of one class only will be given in this subject.

XVI.—Portuguese.

Examiner.—João Lopes.

Candidates should be able—

(*For Third-class Certificates.*)

1. (*a*) To answer a few questions in Portuguese grammar; (*b*) to compose into Portuguese a few short sentences; (*c*) to translate two or three paragraphs, both from Portuguese and English elementary books.

(*For First and Second-class Certificates.*)

2. In addition to the above, candidates will have to translate into English, and *vice versâ*, a few short passages and subjects of a technical, commercial, or scientific character.

3. To write a short original letter in Portuguese on a given commercial subject.

Books recommended:—Vieyra's Portuguese and English Grammar, 7s.; Vieyra's Dictionary (two volumes), 10s.; and d'Orsey's Colloquial Portuguese, 3s. 6d. Any of these books may be had of *Messrs. Gilbert and Field*, 67, Moorgate-street, E.C.

XVII.—Russian.

Examiner.—Very Rev. Eugene Smirnoff, Chaplain to the Russian Embassy in London.

Candidates will be required:—

1. To show a fair knowledge of Russian grammar by answering four or five different questions put down for this purpose in the examination paper.

2. To translate into English extracts from the works of some Russian modern writer.

3. To translate into Russian some passages from an English author.

4. To write a composition in Russian on a given scientific, technical, or commercial subject.

5. To translate M.S. letters at sight.

The Russian portion of the paper will be printed in Russian characters.

Books recommended:—Henry Riola's "How to Learn Russian: a Manual for Students of Russian," A. Ivanoff's Russian Grammar: and for the higher knowledge, Perevlessky's "Practical Russian Grammar" (in Russian).

XVIII.—Danish.

Examiner.—

1. Candidates will be required (*a*) to translate Danish and English paragraphs into English and Danish respectively. Some of the Danish portions will be printed in Gothic (German) characters; (*b*) to answer questions in Danish grammar. In addition, candidates for a First or Second-class certificate will have (*c*) to show a fair knowledge of Danish scientific, commercial, or technical expressions and idioms; (*d*) to write a short original letter in Danish on some given subject.

2. The candidates will be given a choice of passages and subjects of a scientific, commercial, and technical character, in order that they may select whichever they prefer.

3. Books recommended:—E. C. Otté, "How to Learn Danish (*Kegan Paul, Trübner and Co.*); "General Mercantile Correspondence," Dano-Norwegian part (*Kegan Paul, Trübner and Co.*); "Elbe; 100 Timer i Engelsk" (*Steen and Son*—Copenhagen).

XIX.—Chinese.

Examiner.—Professor Robert K. Douglas.

The examination will include questions on the nature of the language, its grammar and syntax.

The candidates will be required to show a power of writing Chinese.

The colloquial forms of the language are specially important.

Passages will be set for translation from Chinese into English, and from English into Chinese.

Books recommended:—Wade's Tzu êrh chi, 2nd ed.; Douglas's Chinese Manual (*W. H. Allen and Co.*); Edkins's Grammar of the Mandarin dialect; Zottoli's Cursus litteraturæ Sinicæ (*Kegan Paul, Trübner and Co.*).

XX.—Japanese.*

XXI.—Domestic Economy.

Examiner.—Miss Lankester, Secretary of the National Health Society.

1. By this is meant a knowledge of the management of household matters, and the principles on which they are conducted: "the why and the wherefore" of everything under this head. Food and Cookery—what the essentials of good cookery are—what the candidate can cook, and how to do it. Sick room cookery. Food for young children—most economical and nutritious food for a family. Diet for sick people. Care of the sick.

2. Clothing of various kinds, how best fitted for varying climates, seasons, and occupations, materials, needlework, rational dress, evils of tight lacing, high heels, &c.

3. The sanitary regulations of a house, how to keep home healthy, ventilation, warming, lighting, dust and waste removal, drainage, drinking water, filtration, &c.

4. Furnishing a house. Arrangement of the sick room. Wall papers, decorations for walls, floors, &c., stoves for cooking and warming.

5. Washing, laundry work, scrubbing and household cleaning, personal cleanliness, baths, &c.

6. How to make the most of a small income. Candidates may be required to write out a table of weekly expenditure for a small family.

7. Candidates will be required to answer questions respecting the Post-office or other savings' banks, the investment of small savings, life insurance, pensions, and annuities.

8. Candidates are expected to have acquired personal and practical experience on the above subjects, but the following books may be consulted with advantage:—

Health in the House. Mrs. Buckton. (*Longmans, Green and Co., Paternoster-row. Price 2s.*)

Our Dwellings, Healthy and Unhealthy. Mrs. Buckton. (*Longmans, Green and Co. Price 3s. 6d.*)

The Making of the Home. Mrs. S. A. Barnett. (*Cassell and Co., Limited.*)

Domestic Economy. Mrs. Lankester. (*Allman and Son, 67, New Oxford-street. Price 1d.*)

Common-sense Clothing. Edith Barnett. (*Ward, Lock and Co. Price 2s. 6d.*)

The Cookery Instructor. Edith Barnett. (*Ward, Lock and Co. Price 2s. 6d.*)

National Thrift Reader. Mrs. Lankester. (*Allman and Son, 67, New Oxford-street. Price 1s. 6d.*)

Cooke's Domestic Economy. (*Allman and Son, 67, New Oxford-street.*)

Food and Home Cookery. Mrs. Buckton. (*Longmans Green and Co.*)

Cookery for Small Incomes. Miss Mary Harrison. (*Longmans, Green, and Co.*)

Domestic and Personal Hygiene. (*Allman and Son, 67, New Oxford-street.*)

Domestic Economy. Miss Barnett. (*Macmillan and Sons.*)

XXII.—Rudiments of Music.

Examiner.—W. G. McNaught, Mus. Doc.; F.R.A.M.

Elementary Certificate.—The treble and bass staves. The major scales and their signatures. Intervals found in the major scale. Transposition from one major key to another. Values of notes, dotted notes, tied notes, and rests. The meaning of the time signatures $\frac{2}{2}$ $\frac{2}{4}$ $\frac{3}{2}$ $\frac{3}{4}$ $\frac{3}{8}$ $\frac{4}{2}$ $\frac{4}{4}$ $\frac{4}{8}$ $\frac{6}{8}$. Transcription by doubling or halving values. Musical terms in common use.

Higher Certificate.—All the proper clefs. All major and minor scales and their signatures. Diatonic and chromatic intervals. Transposition. Analysis of key of given passages. Values of notes in all the commonly used times. Transcription of time. Musical terms in common use.

Candidates are recommended by the Examiner to use the interval nomenclature shown on the following Table:—

Read from below upwards.

Perfect Octave	C	D	E	F	G	A	B
Major 7th	B			E			
Minor 7th		C	D		F	G	A
Major 6th	A	B		D	E		
Minor 6th		C			F	G	
Perfect 5th	G	A	B	C	D	E	
[1]Aug. 4th or [2]Diminished 5th			[1]B		[2]F		
Perfect 4th	F	G	A		C	D	E
Major 3rd	E			A	B		
Minor 3rd		F	G			C	D
Major 2nd	D	E		G	A	B	
Minor 2nd			F				C
	C	D	E	F	G	A	B

All intervals smaller than minor or perfect to be called *diminished*. All intervals larger than major or perfect to be called *augmented*.

* The examination in this subject will be of a similar character to that in other foreign languages.

XXIII.—Harmony.

Examiner.—W. G. McNaught, Mus. Doc. ; F.R.A.M.

Elementary Certificate.—Harmonising (in three and four parts) of figured basses, including common chords, chords of the dominant seventh, and their inversions in major and minor keys.

Higher Certificate.—Harmonising of figured basses, including chords of the 7th and 9th, and common suspensions. Treatment of chromatic chords and of passing notes. Resolution of diatonic and chromatic discords. Simple modulation. Harmonising in four vocal parts of a given melody.

The examination in "Rudiments of Music" and "Harmony" will be held on different evenings, so that candidates desiring to do so may attempt both papers. Candidates must confine themselves to one portion of each paper. Two hours will be allowed for "Rudiments of Music," and three hours for "Harmony." A separate fee of 2s. 6d. will be charged for each division.

XXIV.—PRACTICAL EXAMINATIONS IN MUSIC.

(Held at the Society's House only.)

Examiner:—John Farmer, Balliol College, Oxford, and Director of the Harrow Music School.
Assistant Examiners:—Ernest Walker, M.A., Mus. Bac., Oxon. ; and Burnham W. Horner.

The Examination will be Vocal and Instrumental. For the piano, violin, violoncello, and organ, there will be four standards, and corresponding certificates will be granted. Candidates who pass with distinction in the first, second, or third standard, or honours in the fourth standard, will have the fact recorded on their certificates.

Candidates in the fourth standard will pass or pass "with honours," according to the proficiency they display, and in very special cases of merit will receive the Society's Bronze Medal.

Candidates will be required to state the standard for which they enter, and if they fail to pass such standard will not be granted a certificate for a lower standard.

The class of music recommended for study for each standard is shown in the list appended. From this list a selection will be made and sent to each candidate six weeks previous to the examination. For the instrumental examination the candidates for the piano or organ must choose and prepare any two pieces in such selected list (of which one must be from list A), and will be expected to play them (or parts of them) to the examiner. Candidates for the violin, must play three pieces, or parts of three pieces, from the selected list (one in each of the sub-divisions *a*, *b*, and *c*). Candidates for the violoncello must play one study and two pieces.

In singing, and those subjects not specially provided for, there will not be separate standards, but certificates will be given stating that candidates have "passed" or "passed with distinction," and in the case of those who show special proficiency medals will be granted.

Selected lists will only be sent to candidates for piano, violin, violoncello, and organ.

Vocal.

Candidates in Vocal Music will be required—

1. To sing a solo, already studied. Candidates may select any composition by the following: Bach, Handel, Gluck, Haydn, Mozart, Beethoven, Weber, Schubert, Schumann, Mendelssohn, Franz, Brahms, Wagner, Arne, Purcell, Bennett.
2. To sing or sol-fa at sight passages selected generally from classical music.
3. A key-note being sounded *and named* by the Examiner, the candidate to name sounds or intervals or successions of sounds or intervals, played by the Examiner.

Instrumental.

Candidates in Instrumental Music will be required—

1. For the piano or organ: to play two pieces, or portions of two pieces; for the violin, or violoncello: to play three pieces, or portions of three pieces, chosen from the selected list. For other instruments one piece will be sufficient. If candidates desire to offer themselves for examination in any instrument not provided for in the list, they may select any work by a good composer in which they can best display their proficiency.
2. To play a piece or a portion of a piece at sight. This refers only to the 3rd and 4th Standard.

This examination will be held at the House of the Society of Arts, John-street, Adelphi, London, W.C., and will commence on the 27th June.* Candidates desirous of being examined should apply to the Secretary of the Society of Arts, at the above address, on or before *the 14th May*, for a form upon which to make the necessary returns. No forms can be received after this date.

A fee of 10s. for each subject will be required of all candidates for the fourth standard, and a fee of 5s. in every other case.

There is no limit in respect to age, occupation, or position.

No allowance can be made for age in granting Certificates.

The Council wish it to be clearly understood that Certificates will only be granted to those who show decided proficiency, and candidates are strongly advised to obtain the opinion of a competent judge as to their chance of success, before attempting the examination.

* There will be no Provincial Centres for this Examination which will be held in London only.

In order to promote a proper course of study it is strongly recommended that candidates who only obtain a "pass" in the 1st, 2nd, or 3rd Standard should not attempt a higher standard, until they have passed "with distinction" in that already attempted. They are also recommended to take the Standards in progression.

As many candidates object to the publication of their names, no list of the successful or unsuccessful candidates will be published.

Candidates can continue to attend this examination until they have obtained a medal.

Music from which the selected lists will be prepared, from which lists the candidates will have to choose the pieces they intend to perform at the examination.

Pianoforte.

Standard I. (easy).

A.—*Handel*, Nos. marked A and B (High School ed.). *Bach*, Nos. marked A and B (High School ed., Book I., published by Joseph Williams).

B.—*Mozart*, Cotta ed., No. 1 (1st movement), No. 2 (1st movement), No. 4 (1st movement, or finale). *Beethoven*, Op. 49, No. 1 (1st movement, or finale); Op. 49, No. 2 (1st movement, or finale).

C.—*Schubert*, Dances (High School ed.), Op. 9, Nos. 1, 2, and 3; Op. 50, Nos. 3, 4, and 5. *Mendelssohn*, Christmas Pieces, Nos. 1, 2, or 3. *Gade*, Christmas Pieces, Nos. 2, 3, or 4. *Twelve Melodies by Stephen Heller* (published by Williams).

Standard II. (moderately difficult).

A.—*Bach*, Nos. marked A and B (High School ed., Book II., published by Joseph Williams).

B.—*Mozart*, Cotta ed., No. 7 (1st movement, or finale); No. 9 (Theme and variations). *Beethoven*, Op. 2, No. 1 (1st movement); Op. 10, No. 1 (1st movement); Op. 14, No. 1 (finale); Op. 14, No. 2 (finale).

C.—*Schubert*, Impromptu, Op. 142, No. 2; two Scherzi, No. 1 in B flat, or No. 2 in D flat. *Mendelssohn*, Songs without Words, Nos. 14, 19, or 25. *Chopin*, Mazurkas, Nos. 12 or 34 (Peters ed.); Valses, Nos. 4, 8, or 9. *Schumann*, Papillons, Op. 2 (published by Steingraeber or Breitkopf and Härtel. *Theodor Kirchner*, Albumblätter, No. 2. *Bennett*, Introduction and Pastorale, Op. 28, No. 1. (Joseph Williams ed.). *Field*, Nocturnes, Nos. 1 or 3. *Gade*, Aquarellen, Nos. 1 or 3. *Grieg*, Lyrische Stückchen, Op. 12, Nos. 5 and 6.

Standard III. (difficult).

A.—*Bach*, Preludes and Fugues, Pieces marked A and B (High School ed., Book III., Part I., published by Joseph Williams). *Scarlatti*, Nos. 1, 3, or 6 (High School ed.).

B.—*Beethoven*, Op. 26 (finale); Op. 31, No. 1 (1st movement, or finale). *Schubert*, Op. 53 (1st movement).

C.—*Schubert*, Impromptus, Op. 90, Nos. 1 or 4. *Mendelssohn*, Caprice, Op. 33, No. 1; Andante and Rondo Capriccioso. *Chopin*, Polonaises, Op. 26, No. 1; Op. 40, No. 1; Nocturnes, Nos. 1, 2, 9, or 11; Impromptu, Op. 29; Fantaise-Impromptu, Op. 66. *Schumann*, Davidsbündler, Nos. 1 and 2; Carneval, No. 1; Novelette, No. 4; Fantasiestücke, Op. 12, No. 2. *Bennett*, three Musical Sketches, Nos. 1 and 3. *Grieg*, Albumblätter, Op. 28, Nos. 3 and 4.

Standard IV. (very difficult).

A.—*Bach*, Pieces marked C and D (High School ed., Book III., Part II., published by Joseph Williams). *Scarlatti*, any of the Nos. in Bülow's ed.

B.—*Beethoven*, Op. 53 (1st movement, or finale); Op. 54 (1st movement or finale); Op. 57 (finale); Op. 78 (the whole); Op. 81 (1st movement).

C.—*Mendelssohn*, Variations Sérieuses. *Chopin*, Studies, Op. 10, Nos. 4, 5, or 12; Op. 25, Nos. 6 or 11; Ballade, Op. 38; Scherzo, Op. 39. *Schumann*, Novelette, No. 7; Fantasiestücke, Op. 12, No. 7; Kreisleriana, No. 2. *Theodor Kirchner*, Preludes, Op. 9, Nos. 7 or 8. *Brahms*, Rhapsody, Op. 79, No. 1 or 2.

*** These particular editions are recommended. The sonatas in the Cotta edition can be had separately.

Violin.

Standard I. (easy).

A.—Spohr, Studies Nos. 24, 25, 26, 27, 28, or 29; from Ashdown's edition of Spohr's Violin School. *Steffani*, 12 Progressive Studies, Augener edition, No. 5683, Nos. 7, 8, 9, 10, 11, or 12. *F. Struss*, Studies Op. 6, Heft I. (Novello and Co.), Nos. 5, 6, 7, or 8.

B.—Corelli's Suite in F major, No. 1, Heft X., *David's* Vorstudien; Breitkopf and Hartel edition. *Reinecke's* miniature sonata in A minor; Augener edition, No. 7,543. *Handel*, Sonata in F major (first two movements); No. 3, Vol. I., Peters edition.

C.—Intermezzo "Miniaturen," No. 2, *K. Müller-Berghaus* (Novello and Co.); Schlummerlied Miniaturen, No. 5, *K. Müller-Berghaus* (Novello and Co.); Perpetuum Mobile Miniaturen, No. 4, *K. Müller-Berghaus* (Novello and Co.); Sechs Stücke, Op. 45, *E. Spies* (Schott and Co.), Nos. 1 and 2. *J. S. Bach*, "Loure," in Classiches Stücke for Violin, Vol. I. (Peters); *J. S. Bach*, Sarabande in Classiches Stücke, Vol. I. (Peters); *Bohlmann*, Romance and Hunting Song (Novello and Co.).

Scales of G, A, B♭, and C in two octaves, detached bowing.

Preparatory (suggestions).—Spohr's Violin School up to Exercise 33; *F. Struss*, Studies Op. 6, Heft. I. *Steffani*, 12 Progressive Studies.

Standard II. (moderately difficult).

A.—Spohr, Studies Nos. 37, 38, 40, 41, 43, or 44; from Spohr's Violin School, Ashdown edition. *Hubert Ries*, 15 Studies, Nos. 1, 2, 3, 4, 5, 6, 11, or 12. *F. Struss*, Studies, Op. 6, Heft. II., any one. *Kreutzer*, 2, 3, 4, or 6.

B.—Concerto No. 23 (first movement); *Viotti* (Peters), Sonata in D major. *Handel*, No. 1, Vol. II. (Peters edition), 1st Sonata (edited by Jensen); *Geminiani* (Augener's edition), Suite in E major; *Corelli*, No. 2, Heft X.; *David's*, Vorstudien, Brietkopf and Hartel edition.

C.—Romance *Spohr* (Novello and Co.); Barcarolle, *F. Struss*, Op. 7 (Novello and Co.); Capriccio *F. Struss*, Op. 7, (Novello and Co.); Cascade, Lose Blätter, No. 8, *J. Palaschko* (Novello and Co.); Schwedisch Leider and Tanze, No. 1, Heft I., *Karl Müller-Berghaus*; Ungarische, Vol. II., Bunte Reihe, *F. David* (Augener's edition).

All scales, major and minor, in two octaves, slurred bowing. Intervals of chords through two octaves, all major and minor.

Preparatory (suggestions).—David's Violin School (Part II.) Exercises, 64 to 67, 70 to 85, 94 and 95; Mazas Etudes Speciales, Bk. I., 5, 6, 13, 14, 16, 19 (Peters); *David's* Studies, Op. 45, Bk. I. *Spohr's* Violin School up to Exercise 44.

Standard III. (difficult).

A.—Rovelle's Caprices, No. 2. *Mazas* Etudes Speciales, Bk. I., No. 18. *Kreutzer* 40, Studies Nos. 8, 10, 13, or 24. *Fiorillo's* Studies, 5 or 6.

B.—Concerto in B minor (1st movement), No. 24, *Viotti* (Peters). Chaconne for violin, *Vitali*, in David's Hohe Schule. Concerto in A minor, *Bach* (Peters). Concerto in B flat (1st and 2nd movements), *Rode* (Peters).

C.—Adagio in E major, *Spohr* (Novello and Co.). Scherzino, *Spohr* (Novello and Co.). Canzone and Tarantelle, *Raff* (six pieces for violin, Augener). Brindisi, *Alard* (Schott and Co.). Sarabande and Tambourin, *Leclair* (in Ries' Albumblatter).

All Scales, major and minor, in Three Octaves, slurred bowing eight notes to the bow. Intervals of Chords through three octaves.

Preparatory (suggestions).—David's Violin School, Part II., 64 to 69, 70 to 93, 96 to 100. *Spohr's* Violin School up to Exercise 51; *Kreutzer's* Studies up to Exercise 29. *Fiorillo*, 9, 10, 11, 12, 14, 15, 16, 28.

Standard IV. (very difficult).

A.—Twelve Studies by *Rode*, 3, 5, or 10 (Peters). Concert Etuden, *Vieuxtemps*, 2 or 4 (Peters). *Rovelle's* Caprices, 6 or 9. *Kreutzer*, 33 or 35.

B.—Capriccio for Violin, *Gade*. Third Concerto, op. 61 (1st and 2nd movements), *Saint Saens*. Ninth Concerto (1st and 2nd movements), *Spohr*. Sonata in D (arranged by Hellmesberger), *Corelli* (Kistner). Concerto in A major, with cadenzas (1st movement), *Mozart* (Peters).

C.—Romance, op. 2, *Joachim* (Schott and Co.). Reel, *Stanford* (Stanley Lucas and Co.). Suite in G major, op. 34, *Franz Ries*. Ballade, op. 6, *Ernest Walker* (Joseph Williams). Polonaise, *Mylnarski* (Novello). Saltarelle, *Edward German* (Augener).

To read a piece at sight selected by the examiners. All Scales, major and minor, in Three Octaves, whole scale in one bow. Intervals of Chords through three octaves. Also E major and harmonic minor in thirds, two octaves; B major and melodic minor in sixths, two octaves; D major and harmonic minor in octaves.

Preparatory (suggestions).—David's Violin School, Part II.; *Spohr's* Violin School; *Kreutzer* Studies; *Fiorillo* Studies; *Rode's* Caprices; Neue Tonleiterstudien for Violin, *Carl Haliz* (Novello and Co.).

VIOLONCELLO.

Standard I. (easy).

Piatti's method, Book I. 12 Easy Exercises, *Squire*, No. 7780. 12 Short Studies, *C. Schroeder*. 12 Melodie Studies, Op. 113, *S. Lee*. (All published by Augener.) Drei Kleine Stücke in the 1st position, Op. 29, *Fitzenhagen*, Klassiche Stücke, Book I. (Nos. 3, 2, 5, 1, 6), *Peters*.

Standard II. (moderately difficult).

Piatti's method, Book II. *Dotzauer*, 40 Studies (Augener, 7771). *Merk*, 20 Studies (Augener, 7777). *S. Lee*, 40 Melodie Studies in two books. Marcello Sonata in G minor, *Piatti*. *Davidoff*, Romance in G. *Mendelssohn*, Romance sans Paroles (Novello). Vortragsstudien, *C. Schroeder*, Nos. 1, 2, 3, 4, 6, 11, 12 (Augener).

Technical Studies to be used in this and succeeding standards:—*Grützmacher*, Daily Studies (Augener, 7773). *Hegyesi*, New Rythmical Scale and Chord Studies (Augener, 7772).

Standard III. (difficult).

Grützmacher's Technologie, Op. 38, Book I. *Duport's* Exercises (appendix to method). Sechs Sonaten (*Bach*) for Cello Solo (Grützmacher's edition). 2nd Sonata Marcello in F major, *Piatti*. *Goltermann*, Concertstück in G major. *Goltermann*, Concertstück in D minor.

Standard IV. (very difficult).

Grützmacher's Technologie (Book II.) *Servais*, Six Caprices, Op. 11. *Boccherini* Sonatas (Piatti's edition). Concertino, *Rombergs*, Op. 51 (Augener), *Goltermann's* Concertos, in the order of Nos. 3, 2, 1, *Romberg's* Concertos.

ORGAN.

Standard I. (easy).

A.—*Bach*, Nos. 1, 3, 6, 7, or 18 (High School ed.), published by Joseph Williams; Eight Preludes and Fugues, Nos. 1, 2, 8 (Novello).

B.—*Rheinberger*, Trios, Op. 49, Nos. 1, 2. *Merkel*, Op. 156, Nos. 1, 4, 6. *Mendelssohn*, Andante Sonata, 4.

Preparatory.—Primer, No. 47. "Organ Pedal Technique" (Novello).

Standard II. (moderately difficult).

A.—*Bach*, Nos. 19, 21, 22 (High School ed.), published by Joseph Williams. Fugues in G and C minor (9846, 9847, Augener).

B.—E. J. Hopkins, Adagio cantabile in D. *Mendelssohn*, First Sonata (first movement). *Merkel*, Andante, No. 3, Op. 144.

Standard III. (difficult).

A.—*Bach*, Sonata 3 (finale). Chorale, No. 12 (9812, Augener). Prelude and Fugue (9835, Augener).

B.—*Mendelssohn*, Prelude and Fugue, No. 1. *S. S. Wesley*, Choral Song and Fugue. *Merkel*, Op. 35. *Smart*, Choral and variations. *Rheinberger*, Op. 98 (1st movement).

Standard IV. (very difficult).

A.—*Bach*, Toccata and Fugue in C; Toccata in F; Prelude and Fugue in D; Trio, Book 2 (Bridge-Novello).

B.—*Mendelssohn*, Sonata No. 3. *C. H. Lloyd*. Sonata in D minor. *Krebs*, Fugue in G. *Rheinberger*, Op. 146 (1st and 2nd movements).

TIME-TABLE FOR 1898.

MONDAY, MARCH 21. (7 to 10 p.m.)	TUESDAY, MARCH 22. (7 to 10 p.m.)	WEDNESDAY, MARCH 23. (7 to 10 p.m.)	THURSDAY, MARCH 24. (7 to 10 p.m.)
Arithmetic.	Book-keeping.	English.	Economics.
German.	Italian.	French.	Shorthand (from 7.30 to 10 p.m.).
Elementary German.	Spanish.	Elementary French.	
Portuguese.	Elementary Spanish.	Commercial Geography.	
Précis-writing.	Domestic Economy.	Rudiments of Music (from 7 to 9 p.m.).	
Russian.	Harmony.	Type-writing (from 7.30 to 10 p.m.).	
Danish.			
Chinese.			
Japanese.			

The Practical Examination in Vocal and Instrumental Music will commence on the 27th of June.

In choosing the subjects in which they desire to be examined, candidates must take notice of the arrangements of the Time-table, as they cannot be examined in more than *one* subject on each evening The days and hours of Examination must be *strictly* adhered to.

MEDALS AND PRIZES.

MEDALS.

In each subject, except Rudiments of Music and the Elementary Examinations in Languages, a Society's Bronze Medal will be awarded to the candidate obtaining the highest marks in the First Class, if certified as proficient by the Examiner.

In any subject for which 100 candidates present themselves a second medal will be given.

When there are 500 candidates in any subject a third medal will be given.

For every additional 500 candidates another medal will be given.

The Society's Bronze Medal will be awarded to such candidates in the Vocal or Instrumental Examination in Music as are considered by the Examiner to deserve that distinction.

PRIZES.

The Council of the Society offer, out of funds which have been placed at their disposal for the purpose by the Goldsmiths', Merchant Taylors', Skinners', Salters', and Leathersellers' Companies, a first prize of £3, and a second prize of £2, in each of the following subjects:—

English,
Commercial Geography,
French,
German.

The Clothworkers' Company offer First, Second, and Third Prizes of £5, £3, and £2 respectively in each of the following subjects:—

Italian,
Spanish,
Portuguese.

The prizes will only be awarded to candidates who have taken First-class Certificates, and are certified as proficient by the Examiner in each subject.

The above prizes are additional to the Bronze Medals, which will be awarded to the candidates obtaining the highest number of marks in the First-class of each subject, under the conditions stated above.

No prizes are offered in the Elementary Examinations in Languages.

The Council have accepted the offer of a scholarship made by the London School of Economics and Political Science for the most successful candidate in Economics. It will entitle the scholar to a course of training in Economics or Political Science, extending over three years, and to free admission to all the lectures, &c., arranged at the school during that period.

Candidates may continue to attend the Examinations in any subject until they have gained the First Prize, but no candidate can take a prize of the same grade twice in the same subject. A candidate who has gained a medal with a Second Prize can compete again for a First Prize in the same subject, but will not receive another medal.

COMMITTEES IN CONNECTION WITH THE SOCIETY OF ARTS.

(*See Rule* 9, *page* 6.)

CENTRES.	SECRETARIES.
Aberaman, Aberdare ..	Mr. W. T. Roberts, 343, Cardiff-road, Aberaman, Aberdare.
Aberdeen, Central Public School.....	Mr. Thomas Hector, 31, King-street.
,, Music School, 5, Bonaccord-square	Mr. Alex. Webster.
,, Robert Gordon's College	Mr. Thomas Fotheringham.
,, Young Men's Christian Association	Mr. James Coutts, 80, Desswood-place.
Abergavenny	Mr. Fred Baker-Gabb, The Willows.
Abertillery, Science and Art Classes.....	Rev. Thomas Griffiths, Scrainton-villa.
Accrington, Municipal Technical School	Mr. John Rhodes.
Acton	Mr. Wm. Bolton, 4, Cumberland-park, Acton.
Ashford, S.E. Railway Mechanics' Institution	Mr. Hugh McColl.
Ashton-under-Lyne, Technical School	Mr. D. H. Wade.
Auchmill, Buxburn Science School	Mr. James Michie, Redpool.
Bacup	Mr. Wilson Greenwood, 18, Regent-street.
Barking (Essex).....	Mr. Josiah T. Edwards, School Board office.
Barrowford.....	Mr. H. W. Haworth, School Board Office, Barrowford, near Nelson, Lancs.
Bath	Mr. A. T. Seer, 14, Milsom-street.
Batley (Yorks) Technical School.....	Mr. Benj. Sheard.
Bedford	Mr. W. R. C. Sanders, 12, Grove-place.
Belfast, Business Academy	Mr. L. Lavery, 23, Naples-street.
,, Mercantile College	J. Stringer, Henry-place.
,, School of Commerce	Mr. G. L. Baillie, 21, Arthur-street.
Benfieldside School Board.....	Mr. R. G. Barclay.
Berwick-on-Tweed	Mr. Jas. Gray, 8, Sandgate
Birkenhead Institute ..	Mr. W. F. Terry.
Birmingham and Midland Institute.....	Mr. Alfred Hayes, M.A.
,, Queen's College	Mr. W. E. Brodhurst.
Blackburn, Technical School.....	Mr. A. W. King.
Bolton Church Institute.	Mr. James Finney.
,, Technical School	Mr. F. Wilkinson.
Bradford, Business Training School	Miss Kate Pickard, Swan Arcade.
,, School of Shorthand, 41, Sunbridge-road ..	Mr. J. A. Sutcliffe.
,, Technical College	Mr. John Nutter.
Bradford-on-Avon.....	Mr. Chas. Patrick, 8, Woolley-street.
Brandon (Co. Durham)..	Mr. A. Anderson, 117, Office-street, Browney Colliery, near Durham.
Brecon Middle-Class School	Mr. John Morris, High-street.
Brighouse Mechanics' Institute	Mr. Wm. Morrell.
Bristol, Co-operative Wholesale Society ..	Mr. F. Thatcher, 34, Argyle-road, St. Paul's, Bristol.
Burnley Mechanics' Inst.	Mr. C. M. Foden, J.P.
Bury Technical School..	Mr. John Rigby.
Cambridge, Technical Institute	Mr. Austin Keen.
Cardiff Free Library....	Mr. John Ballinger.
Carron.....	Mr. S. Thorpe, 3, Dawson-terrace, Carron, Stirlingshire, N.B.
Chadderton Technical School	Mr. A. D. C. Henderson, Town-hall, Middleton-road, Oldham.
Chatham.....	Mr. Walter Cuckney, Corporation-offices.
Chester, School of Science and Art	Mr. G. R. Griffith, Grosvenor-street.
Chester-le-street	Mr. G. R. Davidson, Harraton Colliery, Washington Station, Co. Durham.
Chippenham	Mr. Edwin Thomas, Causeway.
Chiswick.....	Mr. W. Radford, 54, Silver-crescent, Gunnersbury.
Colne, Municipal Technical Schools	Mr. Frank Proctor.
Cornsay Colliery, Co. Durham	Mr. John R. Jordon, 173, Gillow-street.
Coventry Technical Institute	Mr. E. Rainbow.
Crewe Mechanics' Inst..	Mr. J. Armstrong.
,, Technical Institute.....	Mr. J. A. Jenkins, Municipal Offices.

CENTRES.	SECRETARIES.
Croydon	Mr. Wm. J. Chambers, The Polytechnic, Scarbrook-road.
Curry (North) Taunton .	Mr. A. R. Wolfe, North Curry Classes, Taunton, Somerset.
Dalton-in-Furness.....	Mr. John Tyson.
Dartford	Rev. C. Major Jenkins, 5, Tower-road.
Devizes, Science, Art and Technical Schools	Mr. A. J. Randell, Exchange-place.
Devonport Technical Schools	Mr. Jas. Neal.
Dewsbury Technical School	Mr. P. F. Lee.
Dover	Mr. J. B. Jones, 185, Snargate-street.
Droylesden.....	Mr. M. Baguley, 922, Ashton-road, Fairfield, near Manchester.
Dukinfield Technical School	Mr. Edwin B. Broadrick.
Dundee, Civil Service Academy.....	Mr. W. D. Smith.
,, Harris Academy .	Mr. W. K. Smith.
,, Morgan Academy	Mr. A. W. Peters.
,, Young Men's Christian Association....	Mr. Jas. H. Smith.
Durham	Mr. Henry Jepson, 20, The Avenue.
Earlstown, Viaduct Inst.	Mr. T. Ormand.
Eccles Co-operative Society	Mr. E. Bayley, 25, Hampden-grove, Patricroft.
,, Municipal Technical Classes ..	Mr. F. Y. Birch, 28, Trevelyan-street.
,, St. Andrew's School.....	Mr. Jas. Lewis, Town Hall.
Edinburgh, McAdam's Institution	Mr. Jas. Denham, 13, S. Charlotte-street.
,, School Board	Mr. James Arnot, M.A., School Board offices, Castle-terrace.
Elland, Mechanics' Institute	Mr. John E. Ackroyd.
Enfield Lock, Parish-room	Rev. C. E. J. Carter, The Priory.
Enfield-town	Mr. W. Ashe Payne, Hurstleigh, River-front.
Etherley, Bishop Auckland	Mr. S. W. Dunn.
Farnham.....	Mr. R. W. Mason, Riverdale, South-street.
Forest Gate, Commercial College	Mr. J. A. Rowe, 68, Hampton-road.
Forfar	Miss J. T. Ewen, Mill Bank.
Frosterley, Darlington..	Mr. R. Bainbridge.
Gateshead-on-Tyne, N.E. Railway Literary Inst...	Mr. F. L. Armstrong.
,, School Board..	Mr. E. J. Harding.
Gillingham, Technical Institute	Mr. W. Harris, Balmoral-road, New Brompton, Gillingham.
Glasgow Athenæum....	Mr. J. Lauder.
,, School Board	Mr. G. W. Alexander, M.A., 129, Bath-street.
,, School of Shorthand.....	Mr. Thos. Cameron, 212, St. Vincent-street.
,, and West of Scotland Technical College..	Mr. John Young, M.A.
,, Young Men's Christian Association, 70, Bothwell-street	Mr. W. M. Oatts.
,, Do. (Southern Section, 137, Norfolk-street)	Mr. Alexander Yuill.
Gloucester	Miss Baddeley, Cathedral House.
Govan, School Board ..	Mr. John A. Craigie, 151, Bath-street.
Gravesend Municipal Technical School	Mr. J. A. Stirton.
Grays, Technical Instruction Classes	Mr. T. Jessop, New-rd., Grays, Essex.
Greenock	Mr. G. Williamson, Municipal-buildings.
Grimsby, Technical School	Mr. Wm. A. Lister, Grammar School.
Guildford, Holy Trinity Schools	Rev. E. C. Kirwan, Charlotteville.
Halifax, Technical School	Mr. J. Crowther.
Hanley, Higher Grade Evening Board School	Mr. John Hodder, School Board Office.
Hebden Bridge, Central Board School.....	Mr. J. H. Thorpe, School Board Offices.
Heckmondwike	Mr. Geo. W. Parker, Vernon-street.
Hetton-le-Hole, Science and Art Classes.....	Mr. Ralph Bolton, The Avenue.
High Wycombe.....	Mr. William T. Pycraft.
Holmfirth, Technical Institute	Mr. Jas. Jackson.
Holywell Green, near Halifax	Mr. Arthur S. Rogers, New-road.
Horwich Mechanics' Institute	Mr. James T. Tatlow, Ravenstone.
Howden-le-Wear, High Grange Technical Classes	Mr. W. Bell, North Bitchburn.
Huddersfield, Galloway's School of Shorthand, 7, New-street.....	Mr. J. E. Bottom.
,, Longwood Grammar School	Mr. H. J. Leech, Market-street, Milnsbridge.
,, Technical School	Mr. Thomas Thorp.
,, Young Men's Christian Association, Devonshire-buildings.....	Mr. T. Leonard.
Hull, Church Institute..	Rev. J. T. Lewis, M.A.
,, Municipal Technical Schools	Mr. J. T. Riley, D.Sc., 7, Albion-street.
,, Young People's Inst., Charlotte-st.	Mr. W. R. Salmon.
Hyde Technical School.	Mr. S. Ashworth.
Ipswich	Mr. Edwin Barrett, 8, Queen-street.
,, School Board ..	Mr. J. Hepburn Hume, School Board Offices.

CENTRES.	SECRETARIES.
Ipswich, Science, Art, and Technical Schools	Mr. Frank Woolnough.
Jarrow School Board	Mr. Geo. Mason, 4, Grange-road West.
Keighley Institute	Mr. A. L. Denby.
King's Lynn Technical School	Mr. Herbert Barrett.
Leeds, Remington School of Shorthand, 3, Cookridge-st.	Mr. Thos. E. Pope.
,, School Board	Mr. W. Packer, School Board Offices.
,, School of Shorthand	Mr. William Skirrow, 52, Winfield Mount.
,, Yorkshire School of Shorthand	Mr. F. J. Dawdry, 10, Park-row.
,, Young Men's Christian Association, 13, South-parade	Mr. T. A. Moffett.
Leicester Technical Sch.	Mr. A. H. Burgess.
,, Working Men's College	Mr. J. Charlesworth.
Leigh, Technical School.	Mr. James Ward.
Lewisham, Elswick Institute	Mr. G. W. Clarke, B.A.
Lichfield Working Men's Association	
Liverpool, Balfour Institute	Mr. T. E. Bridson-Jones.
,, Institute and School of Art	Mr. Harold Whalley.
,, (Central) Young Men's Christian Association, Mount-pleasant	Mr. T. Jameson.
,, (North) Young Men's Christian Association, Foley-street	Mr. R. H. Fisher.
Llanelly	Mr. F. N. Powall.
London, Aldenham Institute, Goldington-crescent, N.W.	Mr. F. E. Sames.
,, Battersea Polytechnic Institute, S.W.	Mr. Sidney H. Wells.
,, Birkbeck Literary and Scientific Institute, Bream's-buildings, Fetter-lane, E.C.	Mr. W. H. Congreve.
,, Borough Polytechnic Inst., 103, Boro'-road, S.E.	Mr. C. T. Millis.
,, Brixton-rd. School of Shorthand	Mr. W. Von der Heyde, 361, Brixton-road, S.W.
,, Canning-town, University Settlement	Mr. W. Reason, M.A.
,, Chelsea, South-west London Polytechnic, Institute, Manresa-road, S.W.	Mr. H. B. Harper.
,, Church of England Young Men's Society, 3, Bride-st., Ludgate-circus	Mr. Percival Etheridge.

CENTRES.	SECRETARIES.
London, City of London College, White-street, Little Moorfields, E.C.	Mr. H. W. Hansen.
,, Clark's Commercial College, 2 and 3, Chancery-lane, W.C.	Mr. J. J. Murphy.
,, College for Working Women, 7, Fitzroy-st., W.	Miss Edith Hodge.
,, Co-operative Wholesale Soc., 99, Leman-st., E.	Mr. W. C. R. Barratt.
,, Cusack Institute, Moorfields, E.C.	Mr. S. J. Drinkwater.
,, Harringay	Mr. W. A. Parkyn, 80, Burgoyne-road, N.
,, Hillmartin College, 17, Busby-place, Camden-road, N.W.	Mr. H. A. Worrall.
,, Holloway College, 315, Holloway-road	Mr. J. L. Emary.
,, Holloway, Northern Polytechnic Inst., Holloway-road	Dr. J. T. Dunn, D.Sc.
,, Kentish Town Training Schls., Wilkin-street, N.W.	Miss Wilkin, Cossey-cottage, Hampstead, N.W.
,, London College of Music, Science, and Art, Holloway-road	Mr. A. J. Shillingford.
,, Mildmay-park Conference-hall.	Mr. P. S. Badenoch.
,, People's Palace for East London, Mile-end-rd., E.	Mr. J. L. S. Hatton.
,, Phonetic Shorthand Writers' Association, 8, Queen-street, Cheapside, E.C.	Mr. F. A. Wilkin.
,, Pitman's Metropolitan School of Shorthand, 27, Chancery-lane, W.C.	Mr. J. G. Richards, B.Sc., B.A.
,, Poplar School of Music, E.	Mr. Lloyd Edwards, 237, East India-road, Poplar, E.
,, School Board, Victoria Embankment, W.C.	Mr. J. Robertson.
,, Smith and Lewis's Type-writing and Shorthand Office, 11A, Union-ct., Old Broad-st., E.C.	Mr. G. H. Thompson.
,, Spital-square, Central Foundation School for Girls	Mrs. Hamilton Brown.
,, Stratford, Carpenters' Company's School	Mr. W. Ping.
,, Tollington-park, 7, Hyde-terrace, N.	Mrs. Roberts, 35, Granville-rd., Stroud-green, N.W.

CENTRES.	SECRETARIES.
London, United Westminster Schools, Palace-st., S.W.	Mr. C. Spencer Smith.
,, Wandsworth, Technical Institute	Mr. W. T. A. Emtage.
,, Westbourne-park Institute, 51, Porchester-road, W.	
,, Westminster Technical Inst., Vincent-square, S.W.	Mr. C. C. Osborne, 1, Stratton-street, W.
,, Young Men's Christian Association, Exeter-hall, Strand, W.C.	Mr. Clarence Hooper.
,, Young Men's Christian Institute, Polytechnic, 309, Regent-street, W.	Mr. Robert Mitchell.
Lowestoft	Mr. R. B. Nicholson, Town Clerk.
Macclesfield	Mr. Wm. Grieves, Townhall, Macclesfield.
Malton, Technical and Art Classes	Mr. H. Lakeman, Brook-terrace, Welham-road.
Manchester, Athenæum, Princess-st.	Mr. T. Schofield.
,, Lower Mosley-street Schools Evening Classes	Mr. W. R. C. Clarke.
,, Municipal Technical School	Mr. J. H. Reynolds.
,, School Board	Mr. C. H. Wyatt.
Marlborough	Mr. W. S. Bambridge, Mus.Bac.
Meltham Mechanics' Institute	Mr. Geo. Moorhouse.
Middlesbrough High School Evening Classes	Mr. R. L. Kirby.
Moses Gate Technical Classes	Mr. J. T. Ashworth, 74, Lorne-street.
Mossley (near Manchester) Mechanics' Inst.	Mr. A. Lawton.
Nantyglo, Mon.	Mr. John Dakers, Blaina, Mon.
Nelson, Lanc., Municipal Technical School	Mr. Jas. Skinner, Townhall.
Newcastle-on-Tyne, Northern Counties School of Cookery	Mr. Chas. Williams, County Office, Moot Hall.
Newcastle-on-Tyne, Rutherford College	Mr. H. Crawford Smith.
,, School Board	Mr. Alfred Goddard.
New Cross, Goldsmiths' Institute	Mr. J. S. Redmayne, B.A.
Newton Heath, Dob-lane Schools	Mr. W. D. Hull.
Northampton	Mr. J. B. Hensman, 6, St. Giles-street.
Norwich Insurance Institute, 105, St. Benedict's-plain	Mr. G. B. Jay.
Norwood Technical Institute	Mr. C. T. Millis, 103, Borough-road, S.E.

CENTRES.	SECRETARIES.
Norwood (South) Polytechnic, 221, Selhurst-road, S.E.	Mr. Jas. Potter.
Nottingham University College	Mr. P. H. Stevenson.
Oldbury, Technical School	Mr. H. A. Anderson.
Oldham, Municipal Technical School	Mr. H. A. Harrison.
Oxford	Mr. Arthur F. Kerry, M.A., City Technical School.
Padiham, Technical School	Mr. Jesse Whitehead.
Penge, Alexandra Schools	Mr. Wm. Goodman.
Penzance Mining and Science School and School of Art	Mr. R. Pearce Couch, 21, Chapel-street.
Perth, School Board	Mr. P. Martin, School Board Offices, 38, Tay-street.
Peterhead, N.B.	Mr. Thomas Mackie.
Plymouth Co-operative Society	Mr. E. C. Burton, 15, Frankfort-street.
,, Corporation Grammar School	Mr. C. J. Park, 1, Mutley-plain.
,, Public School	Mr. W. W. Rickeard.
,, Science, Art, and Technical Schools	Mr. Thos. W. Byfield.
,, Shorthand and Type-writing Academy	Mr. A. C. Body, 2, Salisbury-terrace.
Portsmouth, Municipal Technical Institute	Mr. H. E. Curtis.
Port Talbot, Victoria Institute	Mr. D. L. Ware.
Preston, Harris Inst.	Captain T. R. Jolly.
Reading University Extension College	Mr. F. H. Wright.
Ripponden, Technical Institute	Mr. G. C. Hewitt.
Rochdale, Technical School	Mr. J. W. Jones.
Rochester Technical Institute	Mr. W. H. Marsh.
Ross, Herefordshire	Mr. A. H. Pearson, Warrendale.
Rotherham, School of Science and Art	Mr. H. H. Hickmott.
Sale, Technical School	Mr. George Bethel.
Salford School Board	Mr. O. Duthie, B.A., School Board Offices.
Saltash, Cornwall	Mr. F. Blatchley.
Seacombe, Technical Institute	Miss Mary Stewart, 72, Falkland-road, Egremont, Cheshire.
Seaham Harbour, Co. Durham	Mr. William Campbell, 68, Marlborough-street.
Sevenoaks	Mr. H. J. Thompson, Urban District Council Offices.
Sheffield, Business College	Mr. T. Woodcock, Division-street.
,, Central Higher School	Mr. E. Readman.
,, Church Inst.	Mr. J. T. Darwent.
,, Young Men's Christian Association	Mr. W. Jervis.

CENTRES.	SECRETARIES.
Shipley, The Salt Schools	Mr. William Fry.
Skipton	Mr. James Dodgson, 7, Ringwood-terrace.
Slough, Technical School	Mr. J. Clegg.
Somerton, Somerset	Mr. Edmund W. Valentine J.P.
South Shields, School Board	A. E. Leete, School Board Offices, Ocean-road.
Southampton, Alexandra College, Shirley-park	Mr. W. Dale, 5, Sussex-place.
,, Hartley Institute	Mr. G. J. A. Hatherly.
Southend-on-Sea	Mr. J. C. T. Hemmann, B.A., St. John's College
Spark-hill Institute, near Birmingham	Mr. W. H. Mason, B.A.
Spennymoor	Mr. Jas. J. Dodd.
Stalybridge, Technical Institute	Mr. J. H. Hyde.
Stanhope	Mr. Thos. Philipson.
Stevenage Grammar School	Mr. J. J. Harding.
Stockport Technical School	Mr. Robert J. Brown.
Stockton-on-Tees, Technical Education Committee	Mr. M. B. Dodds, Town Clerk.
,, Young Men's Christian Association	Mr. J. C. Fraser.
Stonehouse, East (Science and Art School)	Mr. R. Robinson Rodd, jun., Town-hall.
Sunderland Young Men's Christian Association	Mr. Henry Johnson.
Swindon Technical School	Mr. H. Hill.
Thetford, School Board	Mr. G. O. Read, School Board Offices.
Thorne, near Doncaster	Mr. R. Brew.
Thornton, Mechanics' Institute	Mr. J. Bell.
Tottenham	Mr. J. W. Tomlinson, 13, Pembury-avenue, Tottenham.
Trowbridge	Mr. H. Ledbury, 57, Castle-street.

CENTRES.	SECRETARIES.
Tunbridge Wells, Technical Institute	Mr. Ernest E. Fenwick.
Ulverston, Lancs.	Mr. F. Booth, Daltongate.
Verwood	Mr. W. Rolles Fryer, Verwood-manor, Salisbury.
Wakefield	Mr. F. Wood, 1, Elvey-street.
Wallasey, School of Science and Art	Mr. J. H. Joynson, 17, Water-st. Liverpool.
Walsall Science and Art Institute	Mr. C. Camwell.
Walthamstow	Mr. P. L. Withycombe, 5, Grove-road.
Warminster, The Athenæum	Mr. T. J. Rushton, George-street.
Waterloo, with Seaforth, Technical School	Miss Annie M. Davies, Town-hall, Waterloo, near Liverpool.
Watford Public Library.	Mr. J. Woolman.
Wednesbury, Municipal Technical School	Mr. George Rose, Town Clerk.
,, St. James's Institute.	Rev. W. R. Mounsey.
West Auckland, near Bishop Auckland	Mr. G. R. Brown.
Willesden, Polytechnic	Mr. W. Houston, Priory-park-road, Kilburn, N.W.
Winsford Science and Art Classes	Mr. J. H. Cooke.
Wolverhampton Free Library	Mr. John Elliot.
Wolverton Science and Art Institute	Mr. R. King.
Woolwich Polytechnic, William-street	Mr. A. J. Naylor.
Wootton Bassett	Mr. H. Bevir, High-street.
Worcester	Mr. Thos. Duckworth, Public Library.
Worsley, Technical Instruction Classes	M. W. Stephenson, District Offices, Walkden, Bolton.
York Railway Institute.	Mr. P. Burtt.
,, School of Science and Art	Mr. A. H. Furnish.

Appendix.

EXAMINATION PAPERS SET IN 1897,

WITH

EXAMINERS' REMARKS UPON THE CANDIDATES' WORK.

ARITHMETIC.

[THREE HOURS ALLOWED.]

The reasoning and the whole of the working must be clearly given. Every candidate must send up some attempt at each of the questions marked **A**, *and as many as they can of the questions marked* **B**. *Candidates for a First-class are expected to answer the questions marked* **C**, *as well as* **A** *and* **B**. *Approximate solutions are expected to questions* **8, 13, 18, 19.**

A. 1. What is meant by a *figure*? what by a *number*? Can the same number be represented by different figures? If so, give examples.

A. 2. Prove that the numbers formed by adding their G.C.M. to each of two odd numbers, have a G.C.M. at least twice the original G.C.M. Find the G.C.M. of 1344033 and 707968.

A. 3. Ascertain whether 2779 is a prime number or not. Also resolve 842673 into prime factors.

A. 4. Simplify

$$\frac{4\frac{3}{5} \div 13\frac{1}{7} + 2\frac{3}{5}}{4\frac{3}{5} + \frac{4}{5} \text{ of } 4\frac{1}{4} + (1\frac{1}{15}\frac{3}{5} + 2\frac{1}{3}) \times \frac{3}{3}} + \frac{4\frac{3}{5} + 3\frac{1}{5} - 5\frac{3}{4}}{2\frac{4}{5} + 1\frac{1}{3} \times 7\frac{1}{5} - 2\frac{3}{5}}$$

A. 5. Show how to express fractions such as ·46, ·4$\dot{6}$, and ·4$\dot{6}$ as vulgar fractions, shewing that your method must be correct; supposing them (i) in the scale of ten, (ii) in the scale of eight.

A. 6. If 777 rupees are worth £50, find to the nearest farthing the value of a rupee. Also find the smallest salary in rupees a month that is an exact number of £ a year.

A. 7. Which is the nearer to ·01 per cent., a minute per week or $\frac{1}{10}$ farthing per £? And by how much?

A. 8. If a map is drawn on the scale of 25·344 *in.* to the mile, find to 4 places of decimals the length of the side of a square on the map that represents an acre.

B. 9. The Queen began to reign on June 20, 1837; when will she have reigned 22000 days?

B. 10. £18, given to a school for prizes, is distributed among forms I. II. III. in the ratios 3 : 4 : 5. The number of prizewinners in forms I. II. III. are as 5 : 4 ; 3. Find the total number of prizewinners, supposing that all in the same form receive the same sum, and as many prizes as possible are given, consistent with each being an integral number of shillings.

B. 11. A cyclist whose speed is ·3 of that of a train at full speed, starts with it on the same journey and arrives 1 *h.* 47 *m.* afterwards. A man takes 4½ hrs. longer than the cyclist to walk the same distance, their speeds being as 2 : 5. If the train goes for 3 furlongs at starting and 2 furlongs at stopping at an average pace of ½ its full speed, and stops for 2 min. at each of 5 intermediate stations, find the length of the journey.

B. 12. A cyclist makes 336 turns with each foot in a mile. Prove that his pace in miles per hour is the number of turns in $10\frac{5}{7}$ seconds.

B. 13. Find, to the nearest penny, the sum paid at the end of each year for 3 years, which is equivalent to £300, 3 years hence, reckoning compound interest at 4 per cent.

B. 14. If the number of different editions has increased 21 per cent., and the total number of books sold increased 19 per cent., while the cost of production of an edition has decreased 8 per cent.; find the ratio of the receipts to the cost of production of an edition which formerly just paid its cost.

B. 15. Supposing that 32 tons of pig lead when corroded produce 40 tons of white lead, that pig lead costs £12 10*s.* a ton, the cost of corroding it is £4 a ton, and that there is expended on the white lead £1 a ton in preparing it for sale; if it realises £17 5*s.* a ton, what percentage is the profit on the total expenditure?

B. 16. Gravel 6 *in.* deep, for a path 3 *ft.* wide, round a rectangular grass plot twice as long as it is broad, at 3*s.* 6*d.* a cubic yard, costs £1 17*s.* 4*d.* What will be the cost of turfing the lawn at 9*s.* 2*d.* per 100 turfs, each a yard long and a foot wide?

C. 17. A number of sheets of paper, each ·00456$\dot{7}$89 *in.* thick, are taken so that the aggregate thickness just exceeds 9·8$\dot{7}$65 *in.* Using decimal fractions throughout, find the amount of the excess.

C. 18. A measurement of 40 *ft.* is known to be within a millimetre of the truth, it is required to find within how much per cent. it is right. Given that a metre is 39·3708 *in.*, find first by a very rough approximation two limits within which the answer must lie, and then calculate it as accurately as the data permit.

C. 19. A gram is the weight of a cubic centimetre of water, a cubic foot of which weighs 1,000 ounces. A ton is 1015·656 kilograms. Find the length of a metre to the nearest tenth of an inch.

C. 20. If 3,360,000 people require 21,000,000 bushels of wheat and 700,000 head of cattle for their yearly support, besides 660 *lbs.* of vegetables each, reckoning 3 acres for each animal, 40 tons of vegetables or 30 bushels of wheat to an acre, find how many people may be fed from the produce of a square mile.

Examiner's report on the papers worked in 1897.

The papers presented the same characteristics as those of last year. The falling off in the number of the best papers and increase in the number of inferior papers continues. Few combine the thorough knowledge of principles, skill in arrangement, perspicuity of explanation, rapidity of work, and the power of treating questions either with accuracy or to a required degree of approximation, that ensured the success of the medallists and first-class students, whose excellent papers were in marked contrast to the imperfect attempts of the many who failed.

Of those who failed, it was evident, many had taken no notice of the reports of former years. The same mistakes are repeated year after year. A mere statement was often given as sufficient for a proof. Some scratch out work that is correct and necessary, and many still write in an illegible and unintelligible manner, without any connecting words to express the course of the argument. Many answers also would have been much improved if the work had been done prominently in the middle of the paper instead of at the side. Some trivial attempts were sent in by candidates who had apparently scarcely made a faint beginning to study Arithmetic seriously.

Many could not say what was meant by a number, regarding it merely as a collection of figures, nor were they acquainted with the expression of numbers in figures in any scale other than that of ten. It is difficult to understand decimal Arithmetic properly without being cognisant of the possibility of other modes of expression. Most could find a G.C.M., adopting in general the "staircase" method; and although they knew how to discover the prime factors of a number, they expressed their work badly. A large number were imperfectly acquainted with the use of the signs $+$, $-$, $\times$, $\div$; and the mistakes in many papers indicated that the writers had never before attempted to simplify a complex fraction involving several of these signs. Most could perform a long division of money, but many gave as a salary in rupees an amount that could not be paid. Confusion about the meaning of per cent. and about the distinction between square and linear measures vitiated several answers.

A question on the calendar was solved awkwardly, even if correctly. A number of practical problems, not involving any considerable manipulation of large numbers, but requiring a certain amount of connected argument, were, in general, imperfectly attempted, and inaccuracy was prevalent. The candidates are apparently not sufficiently accustomed to apply Arithmetic to practical questions. No one answered correctly a question about a cyclist, a walker and a railway train, which involved a large number of small operations, all of which needed to be done consecutively right in order to obtain the result. The questions which were set to test the power of manipulating large numbers were attempted by some candidates, who, in the earlier part of the paper, had shown a very imperfect acquaintance with the elements of Arithmetic. There was in some cases an indication that the study of the subject had been conducted on wrong lines, the attention of the candidates having been concentrated on the performance of operations with figures to the neglect of understanding the meaning of these operations. There was too much mere imitation of processes prescribed by rule, and sometimes these operations were irrelevant. Greater success was attained by those who had exercised their reasoning powers in the study of Arithmetic.

The numerical answers and some hints for solutions are subjoined.

Answers, &c.

A. 2. $1344033 = 3^5 \times 5531$; $707968 = 2^7 \times 5531$; $\therefore$ 5531 is G.C.M.

A. 3. $2779 = 7 \times 397$, and is therefore not prime. $842673 = 3 \times 13 \times 17 \times 31 \times 41$.

A. 4. $\frac{1}{2}$.

A. 6. 1*s.* 3½*d.* 259 rupees a month.

A. 7. 1 *m.* per *wk.*; by 17/50400 %, or ·0000033730158.

A. 8. 1·0018 *in.*

B. 9. 365) 22000 (60 years
100 days.
deduct { 15 leap years.
10 June 21–30,
31 July, 1837
31 August, 60
13 September, 1897. *Ans.*

B. 10. 24.

B. 11. What the cyclist travels in 2 *hrs.* the man travels in 5 *hrs.*, $\therefore$ the man loses 3 *hrs.* on a distance which the cyclist goes in 2 *hrs.*; but the man loses 4½ *hrs.*, $\therefore$ the cyclist does the distance in 3 *hrs.*, $\therefore$ the train at full speed would do the distance in ·3 of 3 *hrs.* or 54 *min.*, and arrive 2 *hrs.* 6 *min.* before the cyclist, but it really arrives 1 *hr.* 47 *min.* before the cyclist $\therefore$ it loses 19 *min.* Of these 10 *min.* are owing to stoppages, and $\therefore$ 9 *min.* by going 30 *fur.* at ½ its full speed, $\therefore$ at full speed the train would go 30 *fur.* in 9 *min.* $\therefore$ in 54 *min.* it would go 180 *fur.* = 22½ miles *Ans.*

B. 13. £96 2*s.* 1*d.*

B. 14. The number of books to an edition is 119/121 of what it was, $\therefore$ the receipts are 119/121 of what they were, and the cost is 92/100 of what it was. $\therefore$ the required ratio is 119/121 : 92/100, which reduces to 2975 : 2783. *Ans.*

B. 15. 21 $\frac{34}{71}$%.

B. 16. £2 15*s.*

C. 17. ·00456789) 9·876571 (2163 sheets
9·13579
·740780
·456789
·2839909
·2740738
·00991711
·01370369
·00378657 *in. Ans.*

C. 18. A millimetre is ·0393708/(12 × 40) of 40 *ft.* $\therefore$ the measurement is within ·0393708/4·8 % of the truth. Very roughly this is between ·03937/4 and ·03937/5, that is between ·0098 and ·0078 %.

To calculate it as accurately as the data permit

48 { 6 | ·393708
8 | ·065618
·008202 %. *Ans.*

C. 19. A ton is the weight of 1015656 *cub. cent.*, or of 2240 × 16 × 1728/1000 *cub. in.*; whence a cubic metre is 2240 × 16 × 1728 × 1000/1015656 *cub. in.* One mode of arranging the operations is as under: there is little advantage in preliminary cancelling.

16 × 224
1344
1728 × 3584
25088
7168
28672
1015656) 61931520000 (60976·9
··99216
·7807
·698
·89

99	2700	60976·9(39·36	
	891	27	39·4 *in. Ans.*
	3591	33976	
	81	[32319]	
1173	456300	1657·900	
	3519	[1379·457]	
	459819	278·443	

C. 20. 761 people.

ENGLISH.

[THREE HOURS ALLOWED.]

[*The questions in Section I. should be answered by all the candidates. Candidates who desire to obtain a First-class Certificate should also answer at least four questions in Section II., including the Exercise in Paraphrase.*]

SECTION I.

I. What is the difference between a vowel and a consonant? Say how many simple vowel *sounds* there are; and by what letters or combination of letters they are represented in our alphabet.

II. Write a short essay descriptive of some of the changes which have taken place during the sixty years of the Queen's reign.

III. What is meant by the Subjunctive and the Imperative moods in English grammar? Give sentences in illustration of your answer.

IV. Analyse the following passage and parse the words printed in italics:—

The stranger *viewed* the shore *around*
'Twas all *so* close with copse-wood *bound*
Nor track nor pathway *might declare*
That human foot frequented there,
Until the mountain maiden showed
A clambering unsuspected road
That winded through the tangled screen
And opened on a narrow green,
Where weeping birch and willow round
With their long fibres swept the *ground*.

V. How many different kinds of Adverbs are there? Give examples. Show also how some adverbs are derived from adjectives, and some from prepositions, and others are formed by a noun and a preposition.

VI. What are "figures of speech"? Give some examples, and mention any English writer who has been distinguished by his frequent use of them.

SECTION II.

VII. Trace to their origin as many of the following words as you can, say in each case what is the meaning of the word, and place it in a sentence to show how it may be properly used:—

Amphibious.	Telegraphy.
Likelihood.	Personality.
Firstling.	Invaluable.
Songstress.	Chapman.
Demonstrative.	Witan-gemote.
Tabernacle.	Emotion.
Subaqueous.	Compassionate.

VIII. Paraphrase the following stanzas: or make a mment of your own upon them:—

It is the land that freemen till
That sober-suited Freedom chose,
The land, where girt with friends or foes
A man may speak the thing he will;

A land of settled government
A land of just and old renown
Where Freedom broadens slowly down
From precedent to precedent.

Where faction seldom gathers head
But by degrees to fulness wrought
The strength of some diffusive thought
Hath time and space to work and spread.

IX. Tell what were the chief writings of the following authors, when they lived, and what were their Christian names: Spenser, Dryden, Pope, Hume, Addison, Macaulay, Gibbon, Wordsworth, Tennyson, Thackeray.

X. What is meant by a Predicate? Say in how many ways the Predicate of a Sentence may be enlarged, and give examples.

XI. Explain what is meant by *metre*, *rhyme*, *alliterative*, *personification*, and *blank verse*, and illustrate each by quotation.

XII. Say how the following compound words are formed and what they mean:—Neat-handed. Snow-white. Breast-high. Evensong. Wednesday. Forebode. Earthborn. Lionhearted. Whereupon. Praiseworthy.

Examiner's report on the papers worked in 1897.

The papers this year evince a fair, though not a high standard of merit, and the number of those entitled to be placed in the First-class, is not so high as could be desired.

I desire again to remind candidates and their teachers that this is a subject in which accuracy is of very special importance. All guesses, vague impressions, and the use of words only half understood, are more readily exposed, and are more fatal to success in a paper on the English language than on one in any other subject. It should be borne in mind that a technical term, whether used in grammatical or in logical analysis, should never be employed unless the writer sees its exact meaning, and always employs it in the same sense. For example, it is not enough to say of one sentence that it is "subordinate" to another, it should also be shown what kind of subordination the sentence illustrates, whether it is equivalent to a noun, an adjective, or an adverb. Nor is it enough in passing to say of a word that it is an "auxiliary" verb, unless it is also shown what sort of additional meaning it attaches to the principal verb; and whether it is an auxiliary of tense, or of mood, or simply indicates a change from the active to the passive voice.

In answering the question about the number of vowel *sounds* in the language, candidates frequently confuse themselves between sounds and letters. This subject cannot be properly treated unless the writer consults his ear as well as his eye. If he does this, he will find that although the alphabet contains only five *letters*, strictly called vowels, there are, in fact, at least twelve perfectly distinct and separate vowel *sounds*; and that these ought to be carefully distinguished, however they may be disguised under our mode of spelling.

It is necessary to repeat the warning against indulging in any conjectures respecting the origin and derivation of words. Whoever answers one of the questions on verbal analysis, should take care first that he recognises the last syllable, and knows its meaning, and from what language it comes, and then, that he understands the exact value and significance of each of the initial and terminal syllables. Unless he does this his answers are apt to be worthless. Fancy etymology, as I have often reminded candidates, is not only dangerous, but sometimes a little ridiculous.

The short essay on the chief characteristics of the Queen's reign, was, on the whole, more satisfactorily treated than the composition exercises of former years.

BOOK-KEEPING.

[THREE HOURS ALLOWED.]

Candidates may answer Question **A** *or Question* **B**, *but not both, and will receive marks according to the merit of the answers. Exercise* **C** *is required of all Candidates.*

A. Explain clearly the difference between Guaranteed, Preference, Ordinary, and Deferred Stocks. How would you keep the Capital and Revenue Accounts of a Reserve Fund Investment in some of them where occasional changes by purchases and sales take place. How would you value the Stocks held at the close of each year?

B. What are Real Accounts? Do you know any other name for them? How are they closed?

C. The "Clayshire Tyke" is a weekly newspaper. The Proprietor's Balance Sheet, on Dec. 31st, 1896, showed Trade Debts owing by him £238 17s. 4d., Subscription Orders received but not fulfilled £201 5s. 6d., Bills Payable Nos. 18 and 19 £120 and £76 14s. 4d. respectively; Owing to Powder & Co. £138 7s. 6d., and to Snowball and Bell £48 9s. 0d.

His Trading Property consisted of Freehold Premises, Machinery and Fixed Plant £4,726 10s. 0d.; Fixtures, Type and Stereos £567 16s. 5d.; Amounts owing by Sundry Agents £187 10s. 0d.; Debts due from Advertisers £71 9s. 5d.; Paper Stock £102 15s. 6d.; Ink, Wrappers, and other Stock £25 7s. 6d.; Cash at Bankers £537 1s. 10d.; Cash in Office £17 2s. 6d; Stamps £6 8s. 0d.

You are desired to determine his Capital, open proper Accounts, and record and post thereto the following transactions. After that you will balance the Accounts, and draw out a Trial Balance, Profit and Loss Account, and Balance Sheet for the period of two months, ending Feb. 27th, 1897. All cash receipts paid into Bank the same day; and all payments, unless otherwise stated, made by Cheque.

1897.	£	s.	d.
Jan. 2. Paid for postage stamps	25	0	0
3. Received cash, sundry agents, as per Cash-book	114	15	8
Discounts and returns for papers unsold, allowed them	21	7	5
12. Received subscriptions in advance as per Subscription Order-book	294	5	6
18. Bought of Powder & Co., paper.. Gave them bill at 2 months.	146	19	0
21. Paid for stamps	55	0	0
25. Bought of Snowball & Bell, ink	15	12	0
29. Received cash from agents	34	7	9
Discount and returns allowed them	10	10	10
Jan. 31. Production account, paid editor and contributors for month	49	9	0
,, ,, paid compositors, machining, and office wages	41	0	0
,, ,, paid sundry expenses for month, office cash	9	11	7
Stamps used for subscribers' copies as per Stamp Book	73	10	0
Advertisement orders for month as per Advertising Journal:— Cash received with advertisements	113	14	6
Credit accounts	142	17	0
Received cash, sales over counter	131	7	4
Total sales to agents for month as per Agents' Book	135	8	6
Production account, News Agency telegrams paid as per Telegram Book	31	17	0
Feb. 1. Paid bill No. 18 due this day	120	0	0
Paid Powder & Co.	133	0	6
Discount allowed	5	7	0
Paid sundry trade accounts owing	59	10	0
2. Received cash, waste paper sold	17	4	4
3. Received payment credit advertisers' accounts	41	15	9
Purchased for cheque sundry trade fixtures for printing office	12	10	0
4. Received cash, additional subscriptions	116	7	6
5. Bought of Powder & Co., paper Gave them bill at 3 months.	231	15	0
Received cash for old type sold	11	4	6
6. Paid for stamps	32	0	0
9. Bought of Snowball & Bell, ink rollers	36	5	8
13. Received cash from agents	95	10	6
Discounts and returns allowed them	27	5	7
16. Received cash, advertisers' credit accounts	75	10	0
Proprietor's private drawings	200	0	0
20. Received cash, waste paper sold	10	4	6
23. Bought of Snowball & Bell, ink	20	11	6
Paid bill No. 19	76	14	4
24. Received cash from agents	24	3	7
Discounts and returns allowed	4	16	6
26. Paid Snowball & Bell	116	0	0
Discount allowed	4	18	2
27. Received cash, sales over counter	128	4	5
Paid gas consumed in January	15	3	8
Paid for stamps	30	0	0
Advertisement orders as per Advertising Journal:— Credit accounts	83	2	6
Cash received with advertisements	152	9	9
Production account, paid editor and contributors.	50	2	0
,, ,, paid compositors, machining, and office wages	47	15	0
,, ,, paid office cash, petty expenses	6	1	9
Stamps used during month for subscribers' copies	69	7	0
Sales to agents for month	140	10	6
Production account, paid News Agency telegrams	42	0	0

	£	s.	d.
Stocks, Depreciation, and Reserves:—			
Stock of paper on hand	220	10	6
,, ,, ink, wrappers, and sundries	15	3	8
Depreciation of building, machinery and fixed plant	32	10	0
,, ,, fixtures, type and stereos	18	9	6
Liability for subscriptions unfulfilled	284	17	6
,, for serial advertisements not yet appeared	21	15	9

Examiner's report on the papers worked in 1897.

Herewith I return the Exercises worked by the candidates at the recent examination, numbering 3,435, together with summary of marks obtained and comparative results. These are shown in the following Table:—

Class.	Number.	Per cent.	Average for preceding 10 years.
First	314	9·14	13·01
Second	1,310	38·14	42·23
Third	1,487	43·29	35·94
Not passed	324	9·43	8·82
Total	3,435	100·00	100·00

I have felt some disappointment in the per-centage of First-class certificates on this occasion. The inferior proportion is not accounted for by any supposed difficulty in the paper nor yet by its length, for in both particulars it was simpler than many of its predecessors. The unwonted subject of the accounts probably had the chief influence. But any originality in the exercise involved no change of principle; and though newspaper accounts have not received much notice either in manuals or exercises, yet such accounts are of very general character, and form no insignificant feature in modern business life.

To the want of frequent preliminary tests I mainly attribute the decline. A student unpractised in examination work is apt to be flurried by the very title of a paper, and this mental agitation may be fatal to the power of doing himself justice even in a paper of very moderate difficulty, involving no departure whatever from the application of well-known principles. To teachers I would venture once more to recommend the frequent use of time tests and preliminary trials, which have many points of value, and even if they yielded no other result would tend to prepare the student for attacking with calmness such an Exercise as this.

Not only is the proportion of First-class low, but the internal standard of quality among the papers themselves is not very satisfactory—in other words, there are fewer really good papers than have been sometimes observed.

COMMERCIAL GEOGRAPHY.

[THREE HOURS ALLOWED.]

[*Any nine questions may be attempted, but not more. Sketch maps should be given wherever it is possible to do so.*]

1. Draw a map of the part of Africa which lies south of the Zambesi, showing political boundaries, sea-ports, railways, and the most important inland towns.

2. Three men decide to go to Africa, one suffering from consumption in the hope of recovering his health, another wishing to have some elephant shooting for sport, and the third to study the manufacture of palm-oil. Where should each go?

3. Distinguish between the territory of the Royal Niger Company and the Niger Coast Protectorate, pointing out the position, the mode of government, and the special trade of each.

4. Give an account of the telegraph lines between Cape Town and Europe.

5. An official is ordered to proceed as rapidly as possible from Brussels to Stanley Falls. Give as full an account as you can of the route he should follow.

6. Which is the most southerly province of Egypt? What are its resources and its special danger?

7. Describe the great lakes of East Africa, and draw a map of them, marking and naming the outflowing river from each.

8. Give a short account of the French possessions in Africa, mentioning the name, mode of government, and commercial products or demands of each.

9. Describe the Suez Canal, and discuss its importance with respect to the trade-routes of the world.

10. Make a list of the chief coffee-growing countries of the world, as nearly as possible in the order of the amount of their output, and say whether the prosperity of each is increasing or diminishing.

11. Mention all the places you know of in the world bearing the name of "Victoria," say where and what each is, and why they bear this name.

12. Give a sketch-map of the route of a sailing-ship from England to New Zealand and home again, marking the prevailing winds likely to be met with at different parts of the voyage.

13. What is meant by each of the following terms:—Bend of the Niger, Chartered Company, Hinterland, Sphere of Influence, Uitlander.

Examiner's report on the papers worked in 1897.

The work done was in several respects more satisfactory than in former years. The geography of Africa was almost uniformly well done, but the general questions, as a rule, were badly answered. It is not apparently quite understood by schoolmasters that the special subject prescribed is not the exclusive subject of the examinations. In all cases a basis of general geography, and of the general facts regarding commercial geography is essential.

The question least frequently attempted and worst answered was one relating to the African telegraph cables; and another on the routes of sailing ships to and from New Zealand was almost equally badly done. In several cases candidates showed the route to be by the Suez Canal, although, in answer to another question, they said correctly that sailing ships scarcely ever passed through the Canal.

In a great many instances recent changes and developments were shown to be well understood. A point which shows a distinct advance on previous examinations is the much more intelligent answering of questions bearing on the possessions of non-British powers in Africa. While there was some tendency shown to underrate the value of the French African colonies, the position and products of them all were well understood.

Some of the maps, drawn in illustration of the answers, were excellent, and very few were really bad.

SHORTHAND.

[TWO-AND-A-HALF-HOURS ALLOWED.]

The perpendicular lines, |, mark the divisions of time, but the reader must not make a pause when they occur, unless the sense requires it. The double line, ||, completes each minute.

Third Class.

No. I.—560 WORDS TO BE READ IN SEVEN MINUTES.

MINUTES.

37, STRAND, LONDON, OCTOBER 1st, 1896.

DEAR SIR,—We have at length received
¼ a report from the | accountants with reference to the affairs of the Brazilian Railway Co., and we enclose a copy for your perusal.
½ We | also forward the annual reports of the directors with the balance-sheets for the
¾ last three years, and copies of | the resolutions passed at the special meeting held in September. You will see that it has been
1 decided to reconstruct || the company on somewhat different lines, and that expectations are held out that the company's
¼ affairs will soon be placed | on a satisfactory footing, and its earnings very largely increased. That is certainly the general
½ feeling in commercial and financial | circles. The shares have risen from 52 to 64 during
¾ the last few days. There has been a | slight relapse to-day, but it is only regarded as temporary. It is quite expected that in the
2 coming season || there will be a considerable increase in the fruit traffic, as the new branch line runs through an extensive
¼ and | fertile fruit-growing district. The cost of labour will probably be increased, but not to such an extent as seriously
½ to | affect next year's dividend.

We shall feel obliged if you will kindly return to us the pamphlets which we
¾ sent | to you last week, as we shall need them in connection with the Government
3 inquiry. If you can arrange to || attend yourself as a witness, we think it will be an advantage, having regard not only to your
¼ own interests | but to those of other shareholders in a similar position. Should you be unable to attend personally, perhaps
½ your general | manager or chief clerk could take your place in order to supply the required information and express your own
¾ views | in the matter. It is believed that the inquiry will only last a few days, and
4 that the decision of || the Government will be given within a fortnight. It is not at present known whether counsel will be permitted
¼ to | attend, but we shall know to-morrow. If permission is granted, we think that you
½ should be represented by an able | advocate. At the last inquiry counsel were not present, but that was a comparatively unimportant investigation hardly requiring professional
¾ assistance. |

In reply to your inquiry as to the new block
5 of buildings, we are glad to be able to state || that, although the weather has been unfavourable for building operations, the contractors are well within their time, and that
¼ in | all probability the block will be completed and ready for occupation before Christmas. Many applications have already been made
½ for | offices, and the agent thinks that they will be easily let and realize good rentals.
¾ The prospects in this respect | have been greatly improved by the announcement that one of the stations of the new line will be
6 nearly opposite || the new buildings. The line is to be opened next summer, so that
¼ the convenience of the station will be | soon felt and appreciated. There has been some dispute with the local authorities as to
½ certain details of the buildings, | but these have been practically settled, and no further difficulty is expected to arise.
¾ We find that the remittances from | the Cape on your account now amount to £1,200.

We are, dear sir,

Faithfully yours,

7 SMART & SONS.

Second Class.

No. II.—770 WORDS TO BE READ IN SEVEN MINUTES.

MINUTES.

At this moment in India, as you all know, there is a population suffering from famine, a population which would make up in point
¼ of numbers a | good-sized European State. The history of the world does not offer any illustration of a community like ours of this country, feeling on our shoulders the responsi-
½ bility | of saving from starvation a vast community divided from us by half the circumference of the globe. We do feel that
¾ responsibility; it is good for them | that we feel it, it is good for us that we feel it. The unselfish employment of that power which wealth gives us, which administration gives
1 us, which || government gives us—the unselfish employment of those great powers in relief of distress which no native ruler could under any circumstances attempt to cope
¼ with, may | make us feel that the British Empire, whatever it may do for the inhabitants of these islands, is at all events a
½ benefit to the world at large. | Now, upon this subject of the Indian famine, it was a great gratification to me as a Lancashire representative, who was called upon to take
¾ some part | in a controversy now happily settled, but which raged less than two years ago, upon the cotton duties—it was a grati-
2 fication to me as || a Lancashire representative to think that in Lancashire the Cotton Duties Association had themselves come forward to express their desire to do what
¼ could be done by private | aid, private benevolence, and private contributions to relieve the distress of our fellow-subjects in the North-West Provinces of India. I have
½ always resented the imptutation, the | most unjust imputation, that was cast upon Lancashire at that time—that Lancashire only considered her own material interests, was only anxious for her own commercial
¾ prosperity, | and that to that end she was prepared to sacrifice the interests of others not less entitled to the impartial consider-
3 ation of the rulers of the British Empire. || No accusation more unjust was ever made, in my opinion. Lancashire never asked at any time that more than fair play should be
¼ given as between producers | in one part of her Majesty's dominions and producers in another part of them; fair play was what she demanded, and nothing more. Surely
½ that was a demand | conspicuous for its moderation. Now Lancashire has an opportunity, in common with other parts of the kingdom, of showing that it is not unmind-
¾ ful of the obligations | thrown upon it by common citizenship. The Government of India have, in my judgment, most rightly declared that the whole responsibility for the
4 conduct of the relief works || must be left in their hands, and in their hands alone, and any interference by another and independent organisation would be productive of nothing
¼ but a waste | of public administration. Holding that view, feeling as they do that the administrative responsibility of these works rests upon them—works that are being
½ carried out with, I | believe, admirable administrative ability, and by which the relief of nearly a million persons is thrust upon them—holding those views, they also
¾ hold that there is a | function for private enterprise in this matter, and that, apart from the relief works and beyond the relief
5 works, much may with advantage be || done, and much ought to be done, to aid the persons now labouring on the relief works—who, before they can labour on the relief
¼ works, must | have parted with all their stock-in-trade, private goods, and private chattels—in aiding them, when the stress of
½ a famine is over, when the seasons have | again proved more favourable, when they can again return to the cultivation of their own fields and the occupation of their own homes,
¾ to restart in life | under not unfavourable circumstances. That is the function thrown upon public charity here and in India, and I am convinced that both here and in India
6 the call || that has been made upon public liberality will be generously responded to. The successive Governments of India, not the present one only, but each Government
¼ which has | had to deal with the weighty responsibility of famine relief, have been of opinion that even charitable relief, given under circumstances which I have described,
½ ought to be | done in concert with the central political administration, otherwise there would be waste, otherwise there would be friction. I leave the matter, with these
¾ few words, to | be dealt with at length, as I have no doubt it will be, by those more conversant with the details of the subject in all
7 its bearings.

First Class.

No. III.—980 WORDS TO BE READ IN SEVEN MINUTES.

MINUTES.

It is not easy for me to speak about Burns, for I have spoken about him so recently and so fully, but I am glad to come here to-day
¼ to unveil another statue in his honour. | The statue is significant in at least two respects. In the first place, it is produced, fitly enough, by melody as I understand, for this effigy is
½ the outcome of popular music which, while | it has at the moment charmed the heart of thousands, has left a permanent embodiment here. This figure is in fact "petrified music." No apter memorial could have been found of the sweet singer of Scot-
¾ land. | In the second place, we citizens of Paisley always remember that a great master of phrases once bade the world, in words so familiar that you might almost
1 adopt them as your motto || "Keep your eye on Paisley." When Paisley, then, takes action of this kind, it may be assumed that her purpose is notable and well-considered. After a century of deliberation, during 90
¼ years at least of | which Paisley has had one and sometimes more Burns' clubs annually expatiating upon the poet, and during the whole of which she has been, I doubt not, watching for an opportunity, Paisley

½ has determined to | erect a statue to Burns, and, looking round at the many that already exist, has determined that hers should be unique. And so this statue may be described, when we consider the means taken ¾ to | provide the money. Moreover, the opportunity has come. Nine years ago, for reasons which I will presently touch upon, there might even have been a more suitable moment, but this year, when we commem- **2** orate Burns' death ‖ —this year, too, which Burns looked forward to as the test of his immortality—offers a fitting occasion for this deliberate memorial. It is well, I think, in ¼ the case of a great genius, that | some memorials should be deliberate, and that some should be immediate. It has been alleged in connection with the memorial to Robert Louis Stevenson—first, that his works ½ are his best memorial; and, secondly | that it would be well to wait and see how these works endure. In answer to the first contention I would submit that it would put an end to memorials altogether, except in cases ¾ where | they would be injurious. It would put an end to memorials of any worthy and enduring fame, and would encourage them only in the case of spurious and fleeting **3** reputations. And as to the second ‖ contention, I would urge this, that it is well enough for the genius, but is not sufficient for the generation in which he lived. They will be taunted with want of appreciation, as were ¼ the | contemporaries of Burns, if they do not, as soon as may be, testify that they realised the fact that a genius had dwelt amongst them. On the other hand, it is also ½ well when, a | century after the death of a great man, his countrymen unite to show by commemoration, as in the present case, that his memory is still green and living amongst ¾ them. As to this statue of | Burns, it may be well to remember two or three points. Manifold are the statues of Burns, but of busts or statues taken from life there is not **4** one; there is not even a cast ‖ of his face taken after death (though we have the cast of his skull), inestimably precious as it would be now. We have to some extent, therefore, to idealise our statue of Burns, ¼ though not | so much as in the case of the statue of Highland Mary which was erected the other day—a graceful tribute to a charming character, but one of whom we possess no ½ likeness whatever. | Still, of Burns we have nothing but canvas, and canvas that is not wholly satisfactory, for the engraving (which was, after all, touched from life), always seemed to me much more powerful and life-like ¾ than the | original painting—to give much more of the vigour of the face and the spirit flashing through the eyes. We have ample scope in a statue of Burns for idealisation, **5** and after all that is not a bad thing. ‖ If we cannot have an image taken directly from life approved as a close likeness by contemporaries, let us try to realise what he was like. We often please ourselves with ¼ fancies, of what | such-and-such a character would look like if he walked into the room where we are sitting. It is perhaps a vain effort, for our surroundings baffle us. How ½ can we fancy Moses, | or Homer, or Cæsar, or St. Paul, or Attila, or Peter the Hermit walking into our library? The mere furniture scares the idea. Luther in his monk's dress we can conceive; the dress remains ¾ unchanged. | And when we get down to the era of portraiture, we can strain our imaginations to see the subjects of Holbein, and Rembrandt, and Vandyck walking out of **6** their frames, and so on to our ‖ own time, until we can realise men who never existed, such as Pickwick or Colonel Newcome, or even Squire Western or Moses Primrose, without a wrench. The difficulty really lies ¼ not in the form or | face of a man, but in the embodiment of the inexplicable force called genius. You can realise perhaps the face; what none can realise is the manner ½ and degree in which genius animated it. | Their eyes did not always gleam, their nostrils did not always dilate, their lips did not always curl—perhaps they never did; they were not always the figures portrayed ¾ for us in works of imagination—perhaps | they never were. But one could not be with them for long without seeing in their faces that they were different from their fellows. What, then, was Burns like, so **7** far as we can tell?

Examiner's report on the papers worked in 1897.

The general work may be regarded as a fair average. The First-class passage was rather more difficult than usual, but it has been well taken down and faithfully reproduced by several of the candidates. Many have failed to give an exact rendering, but due allowance has been made in the adjudication for the difficulty of the paper. Some who have attempted it should have been content to try for a Second-class. Those who aim at too high a standard run the risk of rejection even for a lower grade in which they might reasonably expect to succeed.

TYPE-WRITING.

[TWO AND A-HALF HOURS ALLOWED.]

INSTRUCTIONS.

1. *Each candidate should attempt to complete as much of the work as possible, taking the questions in any order preferred. The quantity completed will be considered a criterion of the speed, but neat work, correct spelling, and punctuation will be first taken into consideration.*

2. *The dictation may be given at any speed, and in any manner convenient to the candidate, but the passage must not be seen by the candidate. It must cease at the expiration of* 15 *minutes, and the reader must then leave the examination room. This does not apply to a member of the committee should one act as a reader. The papers must be given to the superintendent directly the dictation is finished.*

PASSAGE FOR DICTATION.

Time 15 minutes. Take down the passage dictated. Single spacing. 10 margin. Punctuation to be observed. If the whole of the paper is finished before the expiration of the 15 minutes, commence again. Carefully adhere to instructions read out to you by the Committee with regard to delivering your type-script up to the Reader the moment time is called.

First-class candidates must take:—
(1) Dictation paper.
(2) *Either* I. or II. (not both).
(3) No. IV.
(4) No. V.

Second-class candidates must take:—
(1) Dictation paper.
(2) Nos. III., IV., V.

Third-class candidates must take:—
(1) Dictation paper.
(2) No. III. and No. V.

*** *For specimens of some of the passages set, see pp.* 32 *and* 33.

Examiner's report on the papers worked in 1897.

The number of First-class passes must, I suppose, be consided favourable; but I have never had so many mediocre and positively bad sets of papers submitted to me since I became Examiner in Type-writing to the Society of Arts.

This fact points most emphatically to the necessity for careful selection of pupils, and to the advisability of placing pupils with properly qualified teachers.

I would further advise intending candidates for the Society of Arts' type-writing examination to take advantage of any facilities that may come in their way of going in for school or association local examinations, especially those held by the National Union of Typists at their various centres, as a preliminary training for this more difficult and searching one.

ECONOMICS.

[THREE HOURS ALLOWED.]

In order to obtain a Certificate, Candidates must satisfy the examiner in Questions 1 to 6. *In order to obtain a First-class Certificate, Candidates must also satisfy the examiner in Questions* 7 to 12.

1. Explain the following:—*Demand and supply, market price, standard of comfort.*
2. What are the advantages and the disadvantages of the division of labour?
3. What is the relation between value and cost of production?
4. Distinguish between depreciation and debasement of the currency.
5. "Rent does not form any part of the expenses of production." Comment on this statement.
6. State Adam Smith's canons of taxation. How far are they satisfied by (i.) the income tax, (ii.) the duty on tea?
7. State and criticise the wages-fund theory.
8. Account for the excess of the imports over the exports of the United Kingdom.
9. Describe briefly the organisation of industry in the time of Adam Smith.
10. What were the objects of the Mercantile System? Mention any important measures to which it gave rise.
11. Give a brief account of the free trade movement in England.
12. What do you know of (i.) the Physiocrats, (ii.) Malthus, (iii.) Bastiat?

Examiner's report on the papers worked in 1897.

The papers were on the whole better than those of last year. But very few candidates were able to define the terms in Question I. with accuracy or precision, and many of them stumbled at such elementary questions as those on the advantages of the division of labour, and Adam Smith's canons of taxation. Questions IV., V., VIII., and XII. (ii.) were generally done fairly well, but the knowledge of English economic history displayed by the candidates was, with few exceptions, meagre and inaccurate.

PRÉCIS-WRITING.

[TIME ALLOWED THREE HOURS.]

Having read the accompanying Correspondence—

1. Make a short Abstract, Schedule, or Docket of the letters and other papers on the ruled form supplied to you.

2. Draw up a Memorandum, or Précis, *i.e.*, a brief and clear statement of what passed, not letter for letter, but in the form of a narrative. This should commence in the middle of the fold of paper supplied to you, on one of the pages not ruled with a form in red ink.

N.B.—No candidate can expect to obtain either a Second-class or a First-class Certificate who does not attempt the Memorandum or Précis as well as the Abstract, and no candidate can expect to obtain a First-class Certificate who does not produce a fairly good Memorandum.

(1.) The object of the Abstract, Schedule, or Docket is to serve as an Index. It should contain the date of each letter; the names of the persons by whom and to whom it is written; and, *in as few words as possible*, the subject of it. The merits of such an Abstract are—(*a*) to give the really important point or points of each letter, omitting everything else; (*b*) to do this briefly; (*c*) distinctly; and (*d*) in such a form as readily to catch the eye.

(2.) The object of the Memorandum or Précis, which should be drawn up, *not letter by letter*, but in the form of a narrative, is to inform anyone who has not time to read the original letters of all the leading features of what transpired as shown by the correspondence. The merits of such a Précis are—(*a*) to contain all that is important in the Correspondence, and nothing that is unimportant; (*b*) to present this in a consecutive and readable shape, expressed as distinctly as possible, and as briefly as is compatible with completeness and distinctness.

Examiner's report on the papers worked in 1897.

The work done this year is better than that which was done last year. Most of this year's candidates were able to furnish a reasonably good abstract of such letter, but few of them were able to put the substance of the correspondence, as a whole, into a form at once intelligible and comprehensive. Candidates would do well to bear in mind that good Précis-writing is an art that requires some skill and much practice.

A larger number of candidates than usual has been unable within the three hours' limit to carry out the working to such a degree of completeness as to exhibit proof of first-class ability if possessed. Yet it is gratifying that 314 students have so worked the Exercise as to be entitled to this distinction.

The following are specimens of some of the facsimile passages in Typewriting :—

No. I.

tion is to assign the mathematical function which expresses
its energy in terms of the strain, and thence deduce its relations of stress to the
strain. The explanation of the transmission of a push by contact action must be taken to mean this proposition.
principle of virtual work, that in an elastic medium permanently
by certain intrinsic strain, whether it be the statical
action with it contained elastons, or an atomic elastic
solid formed by polar strain-media as described above, the

No. II.

~~his~~ ~~first~~ position. The ~~Bishop~~ Bp of ~~proposing~~ G.
~~interpret. Instead of saying~~ remarks:
That this Case supposes the Law
~~be stopped~~ all concerned. wd volume
live can't be allowed to manage & we get a
~~dark~~ the stuff to that might have formed Eng into a Cromwell
desperate man: ~~(ed 1623 I Blount Sir Philip~~
~~printed, although suppressed in Italy. Dignity of Hist.)~~
Warwick accepted & reproduced the story
that the last words of the famous dying man

No. III.

Drains. Lay a drain 7" glazed earthenware pipes from the house Drains to the
Manure Pit :- All drains are to be 1½ in below the surface and to have
2½" a fall of a Quarter in feet and they are to be jointed in Portland
10" Cement and sand mixed

To insert in the drain under Outlets from Scullery Boxes and
Washing place and the Rain W. Pipe a 6" Gully Trap with galvanized
iron grating.

in the proportions one of sand to two of cement

No. V.

	£	s	d
10 Best Brs 1. Pend in Each 5/6 1. Sty doo.	10	2	15 —
1 Store, 2 Cobbys 2 W.C. 2 H.R.C. 2 Best Brs 2 Sculleys. 1. Pend in Each 5/6. 1. S to Each.	11	3	— 6

FRENCH.

[THREE HOURS ALLOWED.]

All Candidates are expected to take up the whole of Section I., and those aiming at a First or Second class Certificate must also take up either A, B, or C of Section II.

SECTION I.

I. Translate into French :—

A grandmother's receipt for domestic happiness.—Take a large quantity of the clear stream of good sense, and an equal portion of good-nature; mix them well with a sprig of temperance, and put in a good large bundle of thrift, prudence, candour, and humility, with as much gold-dust as you can procure; to give the dish a true zest, add a few accomplishments, taking great care to avoid conceit and affectation, which is sometimes difficult to separate from the flowers of the graces. A scruple of pride will not be amiss, but take very great care it is not of that rank sort so frequently met with amongst mushrooms. Strain these ingredients from dross, let them stand till settled. Then endeavour to procure a good heart, and, if possible, choose it without guile, and put them all into your clean, well polished vase, and keep up a steady fire of affection, which must be constantly supplied by attention and true delicacy, and the longer it is kept hot the better, only take care it does not burn; when it is all ready for use, dish it up—be sure to lay at the bottom, and cover it all over with, the leaves of pure religion. If from time and frequent use you should unfortunately be deprived of any of these ingredients, especially the heart, you must add as much resignation, fortitude, and patience as you can procure, and it will, in some measure, hide the bitter flavour, and be more palatable to yourself and friends. MRS. COBBOLD.

Ipswich, 1814.

II. Translate into English :—

Le malheur de notre race, c'est sa légèreté dès qu'elle s'occupe des affaires publiques. Il n'y a pas d'homme plus laborieux, plus réglé, plus avisé, plus disposé à l'épargne que le Français, qu'il s'adonne à la culture, à l'industrie ou au commerce. Les étrangers qui viennent parmi nous l'admirent. Qu'ils examinent les champs et leur mise en valeur, les exploitations agricoles, l'habileté de l'ouvrier, son dévouement à sa tâche, la qualité de son travail, puis la régularité de l'épargne, la tenue intérieure de la maison, l'éducation de l'enfant par la famille, tout cela est digne d'une grande race. Sous les plis du drapeau tricolore le conscrit porte toutes ses qualités.

Cultivateur, ouvrier, industriel, soldat, celui qui est né sur notre sol possède des qualités incomparables. Qu'il les garde pour l'honneur et pour la grandeur de la patrie!

Mais ce que je vous demande au nom de son salut et de son avenir, c'est qu'en notre République vos fils apprennent de vous à vivre en hommes probes et libres, comme dit la loi, qu'ils apprennent à distinguer l'honnête homme du charlatan, à se détourner de l'utopie pour chercher ce qui est pratique, à accomplir en un mot avec autant de simplicité que de force, sans jamais s'abstenir, et dans toute son étendue, leur devoir de citoyen d'un pays libre. G. PICOT.

And also:

Les opérations du tirage au sort ont commencé hier à Paris.

Parmi les conscrits se trouvait un jeune cuisinier parisien, qui pèse 155 kilos et mesure 150 centimètres de tour de taille. Certainement, il est, sinon le plus gros, au moins un des plus gros conscrits de France.

Ce jeune homme a de qui tenir, puisque sa mère pesait 225 kilos. Comme ses camarades, il avait arboré à son chapeau son numéro de tirage, le 106, et piqué sur sa large poitrine des cocardes multicolores. Il se porte bien, et se croit apte à faire un bon soldat. On sera, dans tous les cas, obligé de l'habiller sur mesure.

Le Petit Journal.

III. Grammatical Questions and Idioms.

1. Add to each of the following nouns a suitable adjective that will show its gender:—*Incendie, espace, opuscule, zèle, écritoire, soufre, épiderme, légume, tonnerre, passage.*

2. Give the different meanings of the words *fils, creuse, peigne, vis, vers, tienne, crû, mets.*

3. Can the same complement in French follow two or more adjectives requiring different prepositions? Translate:—He is worthy of and fit for the post.

4. When does *faire* followed by an infinitive require the pronoun object in the accusative, and when in the dative? Translate:—Make him read and make him write his letter.

5. State with examples the principal cases when the English indicative mood is to be rendered in French by the subjunctive mood.

6. Distinguish between to abuse and *abuser*—to agree and *agréer*—to allege and *alléger*—to attend and *attendre*—to advise and *aviser*—to bless and *blesser*—to butter and *butter*—to charge and *charger*—to delay and *délayer*—to desire and *désirer*—to distract and *distraire*—to dote and *doter*—to dress and *dresser*—to exhaust and *exhausser*—to file and *filer*—to hurt and *heurter*—to hiss and *hisser*—to hum and *humer*—to ignore and *ignorer*—to labour and *labourer*—to manage and *ménager*.

IV. Give the English equivalent of the following French idiomatic expressions or proverbs (in the order in which they are placed):—

Gai comme un pinson.
Vogue la galère!
Il s'en donne les gants.
Il gèle à pierre fendre.
Mais vraiment, on ne se gêne pas!
Trop gratter cuit, trop parler nuit.
De guerre lasse, j'ai cédé.
Qui terre a guerre a.
Se plaindre que la mariée est trop belle.
Il a graissé le marteau.
Il a martel en tête.
Qui menace a souvent peur.
Il veut ménager la chèvre et le chou.
A beau mentir qui vient de loin.
Une mer démontée.
Faute de grives on mange des merles.
On ne prend pas les vieux merles à la pipée.
Dans la mesure du possible.
Chercher midi à quatorze heures.
Le mieux est l'ennemi du bien.
Ils travaillent à qui mieux mieux
L'ironie n'est pas de mise ici.
Depuis sa mise en retraite, il ronge son frein.
On lui a fait grise mine.
A tout péché miséricorde.
Il vous paiera en monnaie de singe.

SECTION II.

A.—Commercial.

I. Translate into French :—

Prices have risen more markedly in iron, steel, and coal than in any other of our staple industries, but there is a general opinion that this rise is warranted by the demand. More than that, the requirements are likely to keep ahead of the supply in the new year, owing to the scarcity of fuel, and prices are more likely to advance still further than recede. Any excessive increase would, of course, tend to check the demand, but that need not be unduly feared. Manufacturers have their order-books full for all kinds of iron and steel work, and some anticipate a year of unprecedented activity. The shipbuilders have been exceptionally busy during 1896, and they are likely to be equally so this year. A very large amount of tonnage has been contracted for. The textile industries are not so buoyant, but they, too, are in a fairly sound condition.

II. Translate into English :—

Notre marché des soies vient de traverser une semaine très mouvementée. Dès lundi matin un syndicat de spéculateurs se manifestait par d'importants achats faits simultanément sur notre place, sur les marchés de l'extrême-Orient et à Londres, visant spécialement les grèges asiatiques qui ont gagné, selon les genres, de 1 fc. 50 à 3 francs par kilogramme. Pendant quarante-huit heures l'animation a été extrême, et elle n'a pas tardé à gagner les sortes d'Europe qui ont fourni, de leur côté, matière à de grosses transactions dues, celles-ci, aux achats de la fabrique de soieries qui s'est empressée de se pourvoir.

Le cuivre a rétrogradé dernièrement à Paris et à Londres, mais la position statistique de ce métal est toujours bonne et prouve l'insuffisance de la production dans ces dernières années.

Le marché des étains est très calme, et le plomb est lourd.

Le calme continue sur les les laines de la Mégisserie de Paris. Les avis de l'intérieur sont en général satisfaisants; les prix sont très fermes aussi bien pour la laine brute que pour les produits manufacturés.

A Elbeuf, les métiers mécaniques et les métiers à la main sont régulièrement occupés.

B.—Scientific.

I. Translate into French :—

Girardon's statue of Louis XIV., which was cast in bronze by the celebrated founder, Jean Keller, in 1699, was of great size, measuring 21 French feet, or about 7 metres in height. It was modelled in plaster, on the site where it was to be cast, in a temporary studio erected for that purpose. When the work of modelling was completed, the entire statue, horse, and rider was piece-moulded in plaster. This was not, however, an ordinary piece-mould, but rather an erection of regular-shaped blocks of plaster, of such size and weight as to be easily lifted by hand. This very complicated mould was regularly built up in courses like masonry, each piece being keyed to its neighbours, until the entire stature was built in. The blocks, which were all carefully numbered and countermarked, were then removed one by one, and each lined with wax. This was first painted on with a brush, and when a very thin layer was thus obtained it was backed up by sheets of wax, rolled out to the required thickness, which varied according to the position, some of the parts being very thick indeed.

II. Translate into English :—

Tout végétal, explique M. Gautier, se compose de quatorze éléments, dont quatre éléments organiques: carbone, hydrogène, oxygène, et azote, et dix éléments minéraux: soufre, acide phosphorique, chlore, silice, fer, manganèse, magnésie, chaux, soude, et potasse.

Les éléments organiques se dissipent, quand on brûle la plante, en vapeurs, gaz ou fumées. Les éléments minéraux survivent, à l'état de cendres, à l'incinération du végétal.

Sur les quatorze éléments, il y en a dix que la plante s'incorpore elle-même, qu'elle trouve toujours en quantité suffisante dans la terre et dans l'air: ce son, le carbone, l'hydrogène, l'oxygène, le soufre, le chlore. le silice, le fer, le manganèse, la magnésie, et la soudet Et ces dix éléments forment les quatre-vingt-dix-sept centièmes de la plante.

L'homme, dans la culture, n'a donc à s'inquiéter que de quatre éléments qui constituent trois pour cent du végétal: l'azote, l'acide phosphorique, la potasse et la chaux: il n'y a pas moyen, dit M. Gautier, de se passer de ces quatre éléments cardinaux, les fertilisants par excellence, le véritable sel de la terre, le ferment qui seul peut faire lever la pâte végétative. Associez aux doses convenables que, seule, la pratique tâtonnante a pu arriver à déterminer exactement, les quatre substances fertilisantes, et vous avez en main de quoi satisfaire à toutes les exigences de la végétation.

C.—Technical.

I. Translate into French :—

During the Indian Mutiny the rifle ammunition was found so defective that, in order to load the arm after a few rounds, the ramrod had often to be hammered against anything at hand so as to get the bullet down the barrel; and this resulted from the lubricating material—namely, tallow, having been absorbed by the paper. Fortunately, just about this time it was discovered that by using pure beeswax in the place of tallow, and by reducing the diameter of the bullet, easy loading and accurate shooting were secured under all conditions of climate and at all times. Had it not been for this discovery the Enfield rifle or any muzzle-loading rifle must have been condemned as a general weapon for the service.

When it became apparent that shooting in the practice ground and service in the field were two very different things, alterations were made in the drill, an increased number of rounds for practice was allowed, and to encourage the soldiers prizes and badges were given for proficiency in shooting.

II. Translate into English :—

Le tarif exempte de droits toutes les matières premières employées dans les manufactures, ainsi que les laines et poils de chèvre, poils de chameau, charbon bitumineux, minerai de fer, minerai de cuivre, fers-blancs, bois de charpente, sel, minerai de plomb argentifère, lin, chanvre, jute et un grand nombre de produits chimiques. Si ce projet est adopté, les droits spécifiques sur les bouteilles et les verreries seront considérablement réduits.

Les huiles et les couleurs subiront une légère réduction, les droits sur les glaces coulées seront abaissés au tarif uniforme *ad valorem* de 40 %.

Les rails d'acier payeront environ huit dollars par tonne; les fontes de fer payeront environ 5 % *ad valorem*, et le fer en barres environ 50 %.

Des droits *ad valorem* seront substitués aux droits actuels sur la coutellerie.

Les droits sur la soie seront probablement réduits de 5 %. Les droits sur les articles de laine suivront les dispositions de la loi de 1892, et les marchandises bon marché seront classifiées à part et payeront 30 % *ad valoreu*.

La corderie sera probablement exempte de droits.

Les houblons payeront 8 %; les gants payeront 25 % *ad valorem*.

Les droits sur les produits textiles du coton, y compris la mercerie et la bonneterie, seront considérablement réduits, ainsi que ceux sur les lins, chanvres et jutes manufacturés.

ELEMENTARY FRENCH.

[THREE HOURS ALLOWED.]

All Candidates are expected to take up the whole of this Paper. Certificates of one class only will be given in this subject.

I.

Translate into English :—

Peu de carrières ont été aussi pleinement, aussi vertueusement, aussi généreusement remplies que celle de Franklin, ce fils d'un teinturier de Boston, qui commença par couler du suif dans des moules de chandelles, se fit ensuite imprimeur, rédigea les premiers journaux américains, fonda les premières manufactures de papier dans ces colonies, dont il accrut la civilisation matérielle et les lumières; découvrit l'identité du fluide électrique et de la foudre; devint membre de l'Académie des sciences de Paris et de presque tous les corps savants de l'Europe; fut auprès de la métropole le courageux agent des colonies soumises; auprès de la France et de l'Espagne le négociateur heureux des colonies insurgées, et se plaça à côté de George Washington comme fondateur de leur indépendance; enfin, après avoir fait le bien pendant quatre-vingt-quatre ans, mourut environné des respects des deux mondes comme un sage qui avait étendu la connaissance des lois de l'univers, comme un grand homme qui avait contribué à l'affranchissement et à la prospérité de sa patrie, et mérita non-seulement que l'Amérique tout entière portât son deuil, mais que l'Assemblée constituante de France s'y associât par un décret public.

Sans doute il ne sera pas facile, à ceux qui connaîtront le mieux Franklin, de l'égaler. Le génie ne s'imite pas, il faut avoir reçu de la nature les plus beaux dons de l'esprit et les plus fortes qualités du caractère pour diriger ses semblables, et influer aussi considérablement sur les destinées de son pays. Mais si Franklin a été un homme de génie, il a été aussi un homme de bon sens; s'il a été un homme d'Etat glorieux, il a été aussi un citoyen dévoué. C'est par ce côté du bon sens, de l'honnêteté, du dévouement, qu'il peut apprendre à tous ceux qui liront sa vie à se servir de l'intelligence que Dieu leur a donnée pour éviter les égarements des fausses idées—des bons sentiments que Dieu à déposés dans leur âme, pour combattre les passions et les vices qui rendent malheureux et pauvre....Sa vie est un modèle à suivre. Elle offre surtout des enseignements et des espérances à ceux qui, nés dans une humble condition, sans appui et sans fortune, sentent en eux le désir d'améliorer leur sort, et cherchent les moyens de se distinguer parmi leurs semblables. MIGNET *(Portraits et Notices)*.

II.

Translate into French :—

Will you read?—Yes, I will.
Would she go?—No, she would not.
Are you writing your letter?—Yes, I am.
Are you listening?—Yes, I am.
Has he any money?—Yes, he has.
Do you know that town?—No, I don't.
All right! that will do.
How will it all end?
How old are you? How tall is he?
Read this book, it will interest you.
I have thee not, and yet I see thee still.
There is a play to-night before the kings.
Thus conscience does make cowards of us all.
Every country has its customs, laws and prejudices.
Fifty-four and twenty-six make eighty.
William the First conquered England in the year one thousand and sixty-six.
She was born in the year eight hundred and eighty.
Why does he never come to see us?
We never saw each other again.
Thy will be done on earth as it is in Heaven.
Give us this day our daily bread.
Eat to live, and do not live to eat.
To work is to pray.
Do not forget us, and write to us as often as possible.
Farewell, God bless you.

III.

1. Conjugate the present subjunctive and imperative of *Accroître, découvrir, devenir, mourir, faire, connaître, apprendre, lire, servir, combattre.*

2. When are you to replace *du, de la, des,* used in the sense of "some," by *de*? Give examples.

3. Write the plural of *plumeau, chapeau, clou, chou,* and of the adjectives *égal, fatal, rural, naval.*

4. Give the feminine of the adjectives *bref, neuf, vif, mou, fou, vieux, nouveau, faux, cher, malin, frais, sec, blanc, gras, contigu, aigu, coi.*

5. Write in the plural the following compound nouns :—*Chef d'œuvre, carte de visite, tire-bouchon, porte-drapeau, manche à balai, blanc-bec, coupe-gorge.*

6. Distinguish between *chaque* and *chacun, quelque* and *quel que, quoique* and *quoi que.*

7. Give the different meanings of *même,* and state with examples when *tout,* although used as an adverb meaning "quite," becomes *toute* or *toutes.*

8. When are "I," "thou," "he" to be expressed by *Je, tu, il*? When by *moi, toi, lui*?

9. Explain the difference of spelling in these two past participles :—Ils se sont *adressé* des injures reciproques, puis ils se sont *adressés* aux tribunaux.

10. Distinguish between Le mode and la mode, le mousse and la mousse, le somme and la somme, le penduie and la pendule, le poêle and la poêle, le tour and la tour, le vase and la vase, le voile and la voile.

IV.

Give the French equivalent of each of the following commercial terms :—

Retail trade.	Invoice.
Wholesale trade.	Freight.
As per sample.	Brokerage.
Partnership.	Instalment.
Sinking fund.	Cost price.
Cotton goods.	Without prejudice.
Average price.	Second-hand furniture.
Export trade.	Sale by auction.
Price list.	Current account.
Carriage paid.	Debit and credit.

V.

Give the English equivalent of each of the following commercial terms :—

Menus frais.	Commissionnaire.
Echantillons.	Devis.
Ci-inclus.	Raison sociale.
Consignataire.	Connaissement.
Destinataire.	Faux frais.
Tant pour cent.	Agent de change.
Hypothèque purgée.	Sauf erreur ou omission.
Passe-debout.	Courtier de douane.
Argent comptant.	Denrées coloniales.
Vin en fût.	Commanditaire.

VI.

Translate into English :—

CHER MONSIEUR,—Vos offres sont trop obligeantes, pour que je n'en sois pas très reconnaissant. Cependant je ne puis en accepter qu'une partie.

La fourniture de chaînes n'est pas une affaire qui me soit personnelle, ainsi que vous paraissez le croire. Je n'agis qu'au nom du conseil d'administration de la société, qui ne m'a pas donné pouvoir de traiter directement, au-dessus de 50 c. par demi-kilogramme.

Dans cette circonstance, et jusqu'à ce que j'en aie référé au conseil, je ne prendrai sur moi de demander que 500 chaînes au prix de 55 c. que vous voulez bien m'offrir. Je regrette sincèrement que les limites qui me sont données ne vous présentent pas quelque avantage, car c'était mon intention en m'adressant à vous....

Nous règlerons à quatre mois en papier sur Paris, à moins que vous ne préfériez tirer, à la même échéance, sur le caissier général de la société.

Tout à vous. A. C.

Examiner's report on the papers worked in 1897.

It is gratifying to be able to report satisfactorily of the work done by this year's candidates. I can recommend no less than 236 of them, or rather more than 72 per cent. for certificates, leaving 91 or a trifle over 27 per cent. "not passed"—a proportion, which I think, contrasts favourably with the results of preceding years. But I cannot refrain from remarking that even this very good result might have been considerably improved if—especially in certain groups—more of the candidates would only condescend to take into account the recommendations conveyed in the published Programme of the Society's Examinations, and be less self-reliant and scornful of guidance.

I can, however, recommend as fairly entitled to distinction, several of the 38 First-class papers, as per list appended to the accompanying return of marks.

With regard to the Elementary examination, I can honestly say that the result has fully justified the step so liberally taken by the Society. No less than 191 candidates have availed themselves of the opportunity thus afforded them of testing their powers in the elementary part of the language, and thereby acquiring some confidence for higher exertions; 123 candidates have "passed" in this Elementary French out of the 191.

Truly, this fresh incentive to early study is a welcome adjunct to the splendid work achieved in the field of education by the Society of Arts, with steadily increasing success, during more than 40 years. It may well be considered an excellent illustration of what can be done by that English self-government, which foreign countries appreciate and admire, but are, as yet, apparently unable to imitate.

GERMAN.

[THREE HOURS ALLOWED.]

N.B.—Candidates are particularly advised to limit their answers to *those portions only* of the following paper which relate to the Class in which they desire to pass.

For Third-Class Candidates.

I. TRANSLATE INTO ENGLISH :—

A.—Während eines Krieges kamen Soldaten in ein Dorf und befahlen einem armen Arbeiter mit ihnen zu gehen, um ihnen den Weg durch die Berge zu zeigen. Es war Winter und sehr kalt und dichter Schnee fiel. Der Mann bat die Bauern des Dorfes ihm einen Mantel zu leihen, aber keiner von ihnen wollte es thun. Nur ein armer alter Mann, der durch den Krieg aus seiner Heimat vertrieben war und als Schmied im Dorfe arbeitete, lieh ihm den seinen. Den folgenden Tag kam ein junger Offizier in das Dorf geritten, fragte wo der Schmied wohne, und ritt vor sein Haus. Kaum erblickte ihn dieser, so rief er aus: „Das ist ja mein Sohn Rudolf." Dieser hatte vor mehreren Jahren Soldat werden müssen, und zeichnete sich durch Mut und Klugheit so sehr aus, daß er zum Offizier ernannt wurde. Er hatte nichts mehr von seinem Vater hören können, aber er erkannte den alten Mantel, den der Mann trug und erfuhr dadurch den Aufenthalt seines Vaters, und war sogleich zu ihm hingeeilt. Die Freude von Vater und Sohn läßt sich nicht beschreiben. Der junge Offizier konnte nur einen Tag bei seinem Vater bleiben, aber als der Krieg zu Ende war, holte er ihn ab, um bei ihm zu leben.

B.—Kaiser Otto der Große war einer der besten Fürsten, die je in Deutschland regiert haben. Seine Mutter Mathilde war eine sehr gute und fromme Frau, aber ihr Sohn fand, daß sie der Kirche zu große Geschenke machte, und wollte ihr darum nicht erlauben, ihr Geld selbst zu verwalten.[1] Darüber war die alte Frau sehr traurig, denn das hatte sie von ihrem Sohne nicht erwartet. Als Ottos Gemahlin hörte, was er gethan hatte, ging sie zu ihm, und sagte ihm, daß er unrecht gehandelt hätte, und er versprach ihr, seine Mutter um Verzeihung zu bitten. Als Mathilde das hörte, freute sie sich, und reiste sogleich zu ihm. Kaum erhielt Otto die Nachricht, daß seine Mutter käme, so ritt er ihr entgegen,[2] und als er sie sah sprang er vom Pferde, und fiel vor ihr aufs Knie, und rief: „O Mutter, seit ich unrecht an dir gethan habe, habe ich keine Ruhe und Freude gehabt, verzeih mir, und bestrafe mich, wie du willst." Seine Mutter hob ihn auf und von der Zeit an blieben sie die besten Freunde.

[1] Verwalten, to administer. [2] Entgegen reiten, to ride to meet.

II. GRAMMATICAL QUESTIONS.

1. Write down the nominative singular with the definite article of: Gedanken — Reichtümer — Nüsse — Mäntel—Blätter—Ochsen—Augen—Studien.

2. Decline in both numbers: Der alte Held—die große Stadt—das junge Kind; putting the adjectives in the superlative degree. Decline also: ein neu-es Hut; eine rot-e Rose; ein klein-es Dorf in the singular only.

3. Write down the infinitive and past participle of trat—lieh—rief—schlug—brannte—bot—fror—nahm—gelang—empfahl.

4. Decline the relative pronouns der, die, das and welcher, welche, welches in both numbers. In which instances should the requisite forms of the former be employed instead of those of the latter? Give examples.

5. Express in German words: the 1st, the 10th, the 20th—of 3 kinds, of 5 kinds—fourfold, sixfold—7 times, 9 times—$\frac{3}{4}$, $\frac{4}{5}$—it is half-past eight.

III. COMMERCIAL PHRASES AND COMPOSITION.

TRANSLATE :—

(*a*) Der Bezogene hat den Accept verweigert—Waren zum Einkaufspreise verkaufen—Diese Zahlungseinstellung hat mehrere Fallimente herbeigeführt—Die ordnungsmäßig girierte Copie eines Wechsels einsenden—Einen Primawechsel mittels Einschreibebrief zuschicken—Den Betrag in Eisenbahnprioritäten und Briefmarken einsenden.

(*b*) I have made the draft payable with you—To be in arrear with one's accounts—To pay freight and shipping charges—The stock of these goods is small, and consequently the prices are high—The average has been estimated at M. 1000.

(*c*) Cardinal Solderini had a statue made[1] by Michael Angelo. When it was finished, he went to see it. He examined[2] it very carefully, and found it very beautiful. He looked at[3] the hands, the feet, etc., and could find nothing that was wrong. But he was afraid[4] that if he praised everything, Michael Angelo might think that he understood nothing about the work, so he said at last that he thought the nose was not quite right, and he asked the artist to alter it. Michael Angelo said that he would do so at once. He picked up his chisel,[5] and, when the cardinal did not see it, he took a little marble-dust[6] in his hand. He then touched[7] the nose here and there, and let some of the dust fall, so that the cardinal should think that he was altering the nose. When he told Solderini that he had done what he wished, the latter exclaimed: "Ah, now the statue is perfect!"

[1] Made, machen lassen. [2] To examine, prüfen. [3] To look at, besehen. [4] To be afraid, sich fürchten. [5] Chisel, Meißel. [6] Marble-dust, Marmorstaub. [7] To touch, berühren.

For Second-Class Candidates.

I. Translate into English:—

(*a*) Passage *B* set for Third-Class Candidates.

(*b*) One of the following passages: *a*, *b*, *c*, or *d*.

[Scientific.]

(*a*) Das neueste große Ereignis auf dem Gebiete der Physik ist die Entdeckung einer neuen Art Strahlen durch den Professor Röntgen in Würzburg. Das Kathodenlicht einer Hittorf'schen Röhre erzeugt nämlich im Glas derselben eine prachtvolle Fluorescenzerscheinung und durch die Kathodenstrahlen werden im Glas der Röhre die sogenannten Röntgenstrahlen erzeugt, die auch außerhalb der Röhre Wirkungen äußern, die den gewöhnlichen Lichtstrahlen in mancher Hinsicht ähnlich sind. Sie unterscheiden sich aber von denselben dadurch, daß sie direkt nicht sichtbar sind, sondern erst mit Hülfe eines fluorescierenden Schirmes aufgefangen werden, und von Linsen und Prismen nicht abgelenkt werden. Sie entwerfen daher von Gegenständen, die sich im Strahlengang befinden, Schatten von verschiedener Intensität, je nach der Durchlässigkeit der betreffenden Körper. Man kann mit ihnen Gegenstände photographieren, die sich im Innern von undurchsichtigen, aber für diese Strahlen durchlässigen Körpern befinden. Es entsteht dann ein Schattenbild, in dem hinter den Knochen die photographische Platte nicht verändert wird. Auf diese Weise kann man die Knochen eines tierischen Körpers photographieren, so daß man zum Beispiel von einer menschlichen Hand deutlich die Umrisse der Knochen und der Fleischteile sehen kann. Die ganze Wichtigkeit dieser Entdeckung ist noch gar nicht abzusehen, in der Medizin besonders hat sie schon zu den merkwürdigsten Resultaten geführt.

[Technical.]

(*b*) Petroleum ist ein natürlicher, im Innern der Erde aufgespeicherter Kohlenwasserstoff, der seit 1859 für Beleuchtungszwecke ein Handelsartikel ersten Ranges geworden ist. Am massenhaftesten findet sich das Petroleum in Nordamerika, und zwar in Schichten, welche dem Alleghanygebirge parallel liegen, und sich vom Ontariosee bis nach Virginien verbreiten. Das rohe Petroleum wird von dem Ort an dem es gewonnen wird nach den Raffinieranstalten geleitet. In der Ölregion Pensylvaniens befassen sich über dreißig Gesellschaften damit. Die Leitung geschieht in eisernen Röhren. Die Ölraffinerien liegen teils in der Ölregion, teils am Eriesee, teils an der Küste des Atlantischen Oceans. Die Raffination des Petroleums besteht in der Behandlung mit Alkalien und Säuren, und in der fraktionierten Destillation, um das Petroleum in Lampenöl und Naphta zu trennen, welche letztere wiederum in Petroleumäther, Benzin, u.s.w. zerfällt. Das raffinierte Petroleum ist eine schwach gelblich gefärbte Flüssigkeit, die mit Hülfe eines Dochtes unter intensiver Lichtentwickelung verbrennt. Setzt man die Leuchtkraft der Wachskerzen = 100, so ist die des Petroleums = 180 bis 195. Auch als Heizmittel hat das Petroleum große Bedeutung. Die in der amerikanischen Dampfmarine der Vereinigten Staaten mit Petroleum gemachten Experimente sind sehr günstig ausgefallen. Ein Dampfschiff mit Petroleum geheizt, kann die See unter Dampf dreimal so lange halten, mit weniger Arbeit, und größerer Ökonomie, als mit einem gleichen Gewicht Steinkohlen.

[Commercial.]

(*c*) In verschiedenartiger Weise äußerte sich der Einfluß der ausländischen Börsen und des internationalen Effektengeschäfts auf den Gang des deutschen Markts. Mehr als die deutschen Plätze hatte die Wiener Börse unter den Nachwirkungen der Erschütterungen zu leiden, die sich im letzten Viertel des Vorjahres vollzogen hatten. Während des ganzen abgelaufenen Jahres zeigte der Wiener Markt Zeichen großer Schwäche, nur selten fiel ihm eine führende Rolle zu, und wenn thatsächlich zuweilen eine Bewegung von Wien ausging, so war sicher darauf zu rechnen, daß sie sich als eine kurzlebige erweisen

werde, da in der Regel das Vorgehen der Spekulation seitens des Publikums keine Gefolgschaft fand.

In fortgesetzt steigendem Maße hatte sich der deutsche Markt mit den Verhältnissen der überseeischen Staaten zu beschäftigen. Im abgelaufenen Jahre hat die zum Teil an den deutschen Markt gebrachte große chinesische Anleihe das Interesse auch auf die Verhältnisse Chinas in verstärktem Maße hingelenkt. Zweifelsohne ist dort noch viel Raum zur industriellen Entwickelung und man hofft, daß bei der Konkurrenz der Kulturstaaten um die Mitwirkung bei der kulturellen Erschließung Chinas Deutschland seinen vollen Anteil erhalten werde; vorläufig aber sind die chinesischen Bestellungen, auf welche die deutsche Industrie schon gerechnet hatte, noch recht spärlich eingelaufen.

In Chile hat sich die Finanzlage verschlechtert, da angesichts der Einschränkung der Salpeterausfuhr die Zolleinnahmen wesentlich nachlassen. Die Durchführung des Konversiongesetzes war keine so vollständige, wie man anzunehmen berechtigt war; die Anleiheschuld Chiles ist auch im letzten Jahre wieder wesentlich gestiegen. Im Gegensatz hierzu präsentiert sich die Finanzlage Mexikos recht günstig.

(*d*) Kohlen.—Im Kohlengeschäft bekundete sich dieselbe anhaltend feste Tendenz, wie am Eisen- und Stahlmarkt. Der Begehr ist seit langer Zeit derart stetig, daß der Absatz sehr gleichmäßig verläuft und auch im Hochsommer keine erhebliche Einschränkung erfuhr; erst der in den letzten Wochen eingetretene Wagenmangel konnte ihn vorübergehend stärker beeinträchtigen. Im laufenden Jahre war der Versandt bisher so stark, daß der Gesammtjahresversandt zweifellos eine namhafte Steigerung gegen das Vorjahr ergeben wird. Die überaus starke Beschäftigung in der Eisen- und Stahlindustrie, und die in den nächsten Monaten in Betrieb kommenden Neuanlagen werden den Kesselkohlenkonsum vermutlich weiter erheblich steigern; für die übrigen Industriekohlensorten liegt schon jetzt eine teilweise so starke Zunahme der Nachfrage vor, daß ihr nicht voll entsprochen werden kann.

Tabak.—Nach Berichten aus Havanna um Mitte Januar sind, da längere Zeit Dürre geherrscht hat, die Aussichten für die neue Ernte nicht gerade günstig. Die Auspflanzungen werden in der „Vuelta Abajo" auf ein Fünftel einer Durchschnittsproduktion veranschlagt, auch in den „Partidos" hat die Kultur nur kleinen Umfang. Zwar hat die Regierung zugesagt, in der Provinz Havanna Zonen anweisen zu wollen, worin der Tabakbau gestattet ist; für 1897 wird dies aber kaum nützen.

Wein.—Wie vorauszusehen war, hat sich das Weingeschäft wesentlich gebessert, sich aber auch das Urteil bestätigt, daß dieser Jahrgang zwar einen dünnen, aber doch recht brauchbaren Wein abgibt. Dem nun zur Neige gehenden 1894r ähnelt er am meisten.

Getreide.—Getreide war ohne einheitliche Tendenz. Weizen erfuhr eine Aufbesserung. Newyork war gut behauptet bei einigem Handel. Roggen verkehrte schwach wegen des andauernden Thauwetters, auch verstimmten größere Zufuhren.

II. Translate the accompanying *fac-simile* German letter into English.

III. Translate into German the English passage *c* set for Class III.

For First-Class Candidates.

I. Translate into English:—

Die Eingeborenen von Norderney sind meistens arm und leben vom Fischfang, der erst im Oktober, bei stürmischem Wetter seinen Anfang nimmt. Viele dieser Insulaner dienen auch als Matrosen auf fremden Kauffahrteischiffen und bleiben jahrelang von Hause entfernt, ohne ihren Angehörigen irgend eine Nachricht von sich zukommen zu lassen. Nicht selten finden sie den Tod auf dem Wasser. Ich habe einige arme Weiber auf der Insel gefunden, deren ganze männliche Familie solcherweise umgekommen, was sich leicht ereignet, da der Vater mit seinen Söhnen gewöhnlich auf demselben Schiffe zur See fährt. Das Seefahren hat für diese Menschen einen großen Reiz; und dennoch glaube ich, daheim ist ihnen allen am wohlsten zu Mute. Sind sie auch auf ihren Schiffen nach jenen südlichen Ländern gekommen, wo die Sonne blühender, und der Mond romantischer leuchtet, so können doch alle Blumen dort nicht den Leck ihres Herzens stopfen, und mitten in der duftigen Heimat des Frühlings sehnen sie sich wieder zurück nach ihrer kleinen Sandinsel, nach dem flackernden Herde, wo die Ihrigen herumkauern und einen Thee trinken, der sich von gekochtem Seewasser nur durch den Namen unterscheidet, und eine Sprache schwatzen, wovon kaum begreiflich scheint, wie es ihnen selber möglich ist, sie zu verstehen.

Heine.

II. Translate one of the above *Scientific*, *Technical*, or *Commercial* passages *a*, *b*, *c*, or *d* set for Class II.

III. Translate the accompanying *fac-simile* letter.

IV. Write a short original composition *in German* on *A* or *B*, or short original letters on *C*.

A. Über das Weſen und die Quellen der Wärme.

B. Über den künſtleriſchen und praktiſchen Nutzen der Holzſchneiderei.

C. Offer of new season's tea of various qualities and enquiries about Mr. N. N.'s character and qualifications for the post of bookkeeper. *Answer:* Order given for the best quality of tea only, and favourable report on Mr. N. N.'s fitness for the post in question.

ELEMENTARY GERMAN.

Only one class of certificate is given in this subject.

[THREE HOURS ALLOWED.]

I. TRANSLATE INTO ENGLISH :—

(*a*) 1. In Deutſchland giebt es viele große Flüſſe und hohe Berge.

2. Es ſind auch viele hübſche Dörfer und ſchöne Städte in Deutſchland. Als wir dort waren, wohnten wir in einer kleinen Stadt, nicht weit von Köln.

3. Im Sommer machten wir lange Spaziergänge, oder fuhren auf dem Waſſer; wir fiſchten auch, und jeden Morgen badeten wir im Fluſſe.

4. Im Winter war es ſehr kalt, aber das Wetter war ſchön, die Sonne ſchien und wir hatten keinen Wind.

5. Wir liefen Schlittſchuh,[1] und wenn Schnee gefallen war, fuhren wir im Schlitten.[2]

6. Mein Vater ſagt, daß wir nächſtes Jahr wieder nach Deutſchland gehen werden.

7. Ich hoffe, wir gehen wieder in dieſelbe Stadt, denn wir haben dort viele Freunde, und meine Geſchwiſter mochten[3] auch ſehr gern dort ſein.

[1] Schlittſchuh laufen, to skate. [2] Schlitten, sledge. [3] Sehr gern mögen, to like very much.

(*b*) In Berlin war im Jahre 1820 eine arme Frau, die auf der Straße ſaß und Bälle machte, die ſie den Kindern für ein paar Pfennige verkaufte. Sie war ſo alt, daß ſie beinahe blind war. Eines Tages ging ein General vorbei, der in dem Kriege gegen Napoleon ein Bein verloren hatte. Die alte Frau konnte ſeine Uniform nicht ſehen und dachte, es wäre ein armer Invalide. „Der Mann iſt noch unglücklicher als ich" dachte ſie, nahm drei Pfennige und hielt ſie dem General hin. Dieſer nahm ſie und dankte ihr. Als er nach Hauſe kam, ſchickte er ſeinen Wagen hin, ließ die alte Frau holen, und behielt ſie, ſo lange ſie lebte, in ſeinem Hauſe.

II. GRAMMATICAL QUESTIONS.

1. Decline in both numbers: Der Tiſch—die Feder—das Meſſer—der Garten—das Buch; and in the singular only: ein Apfel—eine Roſe—ein Dorf.

2. Decline in the singular and plural: Der treue Freund—die lange Straße—das neue Haus. Give the comparative and superlative of: klein—kalt—gut.

3. Write down, in the singular and plural, the declension of the personal pronouns: ich—du—er—ſie; and of the demonstrative pronouns: dieſer, dieſe, dieſes.

4. Conjugate the verb lernen in the present, imperfect, perfect, and first future tenses of the indicative mood.

5. Write down the present and imperfect tenses indicative, and the past participle of: baden and ſtudiern.

III. COMMERCIAL TERMS AND PHRASES AND COMPOSITION.

TRANSLATE :—

(*a*) Ein Handelsgeſellſchafter—Eine Kolonialwarenhandlung — Ein Kommiſſionsgeſchäft — Verkaufsrechnung — Staatspapiere und Aktien—Prompte Annahme finden—Aktiva und Paſſiva—Prokura erteilen—Eine Tratte annehmen.

(*b*) A remittance—The average—Invoice—Profit and loss—To send patterns—At 15 days' date—To give an order—A bill of lading—I have received your favour of the 10th inst.

(*c*) 1. We went to London yesterday, and saw the house which my father has bought.

2. It is very large, and my brother and I are to have a room which we can furnish[1] ourselves.

3. We went out together and bought a table, four chairs, and six pictures.[2]

4. We shall also buy some birds and some plants.

5. We have a dog at home, but as it is very large we shall leave it in the country.

6. My father says he does not like to have large dogs in London, because they cannot run about there as they can in the country, and are often stolen.

7. I hope our old dog will not forget us, but will know[3] us again, when we return[4] to the country in summer.

8. We are to study and work in London, but we shall return to the country when the holidays[5] begin.

[1] To furnish, möblieren. [2] Picture, Bild. [3] To know again, erkennen. [4] To return, zurückkehren. [5] Holidays, Ferien.

Examiner's report on the papers worked in 1897.

It gives me great pleasure to be able to state that there has been another increase in the number of candidates, and that the general result of the examination was more satisfactory than in former years. Last year 203 candidates presented themselves, which was, in itself, a very large increase over the number in any former year, and this year the total was 272 candidates. It is true, this number includes sixty-one candidates for the Elementary class, introduced for the first time during the present year; but as many, if not all the candidates for the latter, would probably have entered for Third-class certificates, the general increase may be considered satisfactory.

Most of the candidates, more especially those for First-class certificates, have given evidence of a satisfactory knowledge of German, which is sure to stand them in good stead in their future respective careers. The success of the candidates, in general, may be attributed to the fact that they followed the advice, so often given to them on former occasions, to confine themselves in their answers to the one class only in which they desired to pass.

As regards the Elementary class, I am happy to say that the general result was very satisfactory; more especially if the circumstance is taken into account that this useful test was introduced for the first time this year, and the candidates hardly knew what amount of knowledge would be expected of them.

In conclusion, I would specially recommend to future candidates who study German for commercial purposes to acquire a more thorough knowledge of German commercial phrases and expressions.

ITALIAN.

[THREE HOURS ALLOWED.]

All candidates, whatever the class of certificate they are desirous to obtain, must take up the whole of the First Section of this Examination Paper. The Second Section is for Candidates aspiring to a First or Second-class Certificate.

FIRST SECTION.

I. Translate into English :—

Si vede alcune fiate, fra la bassezza e le tenebre de' vizii sorger le grandezza dell' animo, risplender la vivacità dell' ingegno, il vigor della mente, la costanza e l' industria, e molte altre parti chiare e lodevoli in chiunque si ritrovino. Quinci chiaramente si raccoglie che 'l vizio, ancorchè sia reo per sè stesso, e d' odiosa e malvagia natura, può aver però qualche compagnia e qualche congiunzione colle cose buone e lodevoli. Di qui similmente si potrà sottrarre che non solo più di tutti i mali della fortuna e del corpo, ma più del vizio ancora dee l' ozio ragionevolmente esser fuggito, poichè non pure non fu mai cagione di bene, ma non può aver nè amicizia nè conformità che sia buona, o che tale almeno si mostra nell' apparenza.

Ove l' ozio signoreggia, ivi non riluce raggio d' ingegno, ivi non vive pensiero di gloria e d' immortalità, ivi non apparisce nè immagine nè simulacro nè pur ombra o vestigio alcuno di virtù. E siccome gli stagni e le paludi putride divengono nella lor quiete, così i neghittosi marciscono nell' ozio loro: e ragionevolmente possono così morti esser chiamati, come quelle acque morte si chiamano. E se 'l sonno è detto esser simile alla morte, non per altra cagione se non perchè lega e impedisce l' operazione de' sentimenti, ben può l' ozio esser detto la morte istessa, poichè richiama non pure il corpo, ma la mente ancora dalle sue nobili operazioni.

Meritano biasmo i viziosi; perchè spogliandosi della ragione, prezioso dono della natura, agli animali bruti cercano d' assomigliarsi; maggiore assai il meritano gli oziosi; poichè privandosi non pur della ragione, ma del senso eziandio, ai sassi ed alle cose inanimate nello stupore e nella pigrizia diventano simili. Ed il vizio, benchè egli non sia natural cosa, non è però contrario alla natura dell' uomo; essendo naturali quelle radici ond' esso, quasi pianta mal culta, suol germogliare.

TORQUATO TASSO *(Scritti Filosofici)*.

II. Translate into Italian :—

In this unhappy battle of Newbury was slain the Lord Viscount Falkland, a person of such prodigious parts of learning and knowledge, of that inimitable sweetness and delight in conversation, and of that primitive simplicity and integrity of life, that if there were no other brand upon this odious and accursed civil war than that single loss, it must be most infamous and execrable to all posterity.

Before the war, his condition of life was so happy that it was hardly capable of improvement. Before he came to be twenty years of age, he was master of a noble fortune, which descended to him by the gift of a grandfather, without passing through his father or mother, who were then both alive, and not well enough contented to find themselves passed by in the descent. His education for some years had been in Ireland, where his father was lord-deputy; so that, when he returned into England to the possession of his fortune, he was unentangled with any acquaintance or friends, which usually grow up by the custom of conversation, and therefore was to make a pure election of his company, which he chose by other rules than were prescribed to the young nobility of that time. And it cannot be denied, though he admitted some few to his friendship for the agreeableness of their natures, and their undoubted affection to him, that his familiarity and friendship for the most part was with men of the most eminent and sublime parts, and of untouched reputation in point of integrity.

CLARENDON *(History of the Rebellion)*.

III.—*Grammatical Questions.*

1. Write the whole of the present indicative, the past definite, and the future of the following verbs :—*pagare, dedurre,* and *venire.*

2. In framing Italian sentences, when are the conjunctive personal pronouns *mi, ti, lo, la, gli, le, ci, vi,* placed before the verb, and when after it? Give examples.

3. Give the principal cases in which the definite article is used in Italian and not in English. Quote examples.

4. Translate the following phrases into Italian :—(*a*) "What o'clock was it, when you met William?" (*b*) "It was noon, exactly." (*c*) "I found Henry's penknife in the middle of the garden." (*d*) "Give me half of that apple; the whole of it would be too much." (*e*) "Rich as he is, he will not be elected a member of our society." (*f*) "Although he has plenty of money, and many other social advantages, he is the most miserable of men." (*g*) "Write to him, lest he should come when I am engaged."

SECOND SECTION.

Candidates aspiring to a First or Second-class Certificate, besides the First Section above, are expected to translate the following commercial phrases, one of the subjoined passages, and to write a letter in Italian.

I. Translate into English the following commercial phrases :—

1. Riceverete, qui accluse, la polizza di carico e la fattura originale.

2. Le spese ammontano a Lire italiane 800; come segue: Nolo £ it. 500. Spese di sbarco e porto a magazzino £ it. 100. Magazzinaggio £ it. 25. Mediazione £ it. 25. Commissione e del credere £ it. 150.

3. Le tratte sull' India si fanno in generale a sessanta giorni vista perchè la lunghezza e l'incertezza del viaggio rende difficile il farle a data.

II. Translate into Italian the following commercial phrases :—(*a*) "Stock Exchange markets present a distinctly depressed appearance all round, owing to the character of the political news from the East, and the apprehensions of further complications." (*b*) "We have in our warehouses several lots of fruits, which we should like to dispose of without delay." (*c*) "In compliance with your wishes, we have insured your goods, just arrived, for £6,000." (*d*) "The sales of coffee have gone off at decline prices."

III. Translate into English:—

Stimato Signore, Ci pregiamo di confermare la nostra del due corr., e con questa vi preghiamo di spedirci, senz'indugio, sei barili di melassa, e dodici casse di fichi secchi, come pure, ben s'intende, le merci specificatevi nella nostra lettera suindicata. Badate che il tutto sia ben incartato e imballato. Vi piaccia di far marcare le casse B. T. 12. e di far assicurare per l'intero importo. Vi autorizziamo ad emettere tratta pel montante, a due mesi data. Il Signor R., di costì, avendoci scritto che, stante inaspettato incaglio ne' suoi negozii, non può far onore alla nostra tratta da lui accettata, vi preghiamo d'intervenire, e di accettare *l'occorrendo*. Vi ringraziamo dei campioni madatici coll' ultima vostra, e vi salutiamo cordialmente. B. e T.

Or—

Venendo ora alle minute circostanze, quest' aria infiammabile arde assai lentamente con una bella vampa azzurrina, non altrimenti che quella da voi ritrovata. Perchè si allnmi e ne apparisca in vago modo la fiamma, conviene che la bocca del vaso sia larga anzichenò; perchè se è soverchiamente angusta, nascono bensì degli scoppietti, e molti e successivi, ma debolissimi e tali che appena potete discernerli. Io soglio adoperare, per le esperienze piccole, un vasello di vetro cilindrico, alto dai tre ai quattro pollici, largo uno in tutta la sua cavità, salvo che nella bocca, la quale ha intorno a un mezzo pollice di diametro. Appressandovi una candela, e pur cosa graziosa il vedere coprirsi la bocca d' una fiammetta azzurra, e questa scendere lento lento lunghesso le pareti del vaso, quasi lambendole, fino al fondo.

IV. Write a short letter in Italian, on the following subject:—"Lo scopo morale, l'utilità e la praticabilità delle Arbitrazioni Internazionali."

Examiner's report on the papers worked in 1897.

I am well satisfied with the work of the candidates who presented themselves this year for certificates of proficiency in Italian. I see, with pleasure, that proper attention is now paid by many of them to the study of translating into Italian; this is as it should be; because a really sound knowledge of a foreign language is only obtained by composing it. I must, however, remind candidates that it is not enough to understand the meaning of Italian commercial phrases; care must also be taken to turn them into English technically. I say this because I have noticed some neglect in this matter in several of the candidates I have just examined.

SPANISH.

[THREE HOURS ALLOWED.]

Candidates aiming at a First or Second-class Certificate must also take up either A. B. or C.

Grammatical Questions.

1. When two or more subjects of the same verb are of different persons, with which does the verb agree in Spanish? Give some examples.

2. State the rule for writing the accent in Spanish.

3. Write down the third person singular of all the tenses of the verbs:—encargar, expedir, saber.

4. State the difference between:—Por dar gusto and Para dar gusto. Casa por vender and Casa para vender. Estoy por salir and Estoy para salir. No estoy por esto and No estoy para esto. Lo hice por complacerles and Lo hice para complacerles. Estoy por decirselo and Estoy para decirselo.

5. Give the past particle of:—volver, romper, poner, hacer, cubrir.

6. Give the English equivalent of the following idiomatic expressions:—Meter bulla. Meterse con alguno. Meterse de limpio. Meterse en bromas. Quedar de sobra. Quedar por andar. Quedar con uno. Quedarse con algo. Quedarse atras. Ir in par. Hacer las veces de otro. Dar por supuesto. Echar de menos. Dar el parabien. Por lo tanto. Hablar al caso. Hablar de veras. Hablar entre si. A mi que se me da? Andar á tientas. Estar á sus anchas. Dar memorias. Afanarse por nada. Ir á una. Salirse con la suya. En mi no cabe tal acción.

Translate into Spanish:—

1. He left us without the means of living. 2. He spoke to me, but he would not speak to my brother-in-law. 3. In writing to him, I shall let him know my intention. 4. I shall come about two o'clock; does it suit you? 5. I saw nobody there except the manager. 6. How long have you been here? 7. You do not look very well; what is the matter with you? 8. We arrived yesterday week, and we will start to-morrow week. 9. He left, promising her to return on the morrow. 10. It may be true, but it seems unlikely. 11. They carry on the war too far. 12. Mind you had better be careful. 13. I am in a great hurry. 14. Do you know what they mean? 15. He seems cast down. 16. I have a bad headache. 17. How did you come by it? 18. As far as I know it was simply a speculation which turned out badly. 19. Why are you angry with me? 20. Do not meddle with other people's affairs.

And also—

Earthquake in Salvador. At five minutes to two in the morning the earth began to shake. Most of the population immediately rushed into the streets; although the shock only lasted twenty seconds, yet, before it had passed away, a panic-stricken mob were making their way to the open country, while a confused mass of men, women and children were shrieking and praying in the streets. The earth rose and fell in long waves, the walls of houses cracked, then tottered and fell; even strong men could not keep their feet. As soon as the disturbance had ceased, the republican government ordered temporary shelters to be thrown up outside the city, but more than two thousand unhappy people had only a sky for a cover.

Translate into English:—

Por mi ventura di en el quinto amo, que fué un buldero, el más desenvuelto y desvergonzado, y el mayor echador de ellas que jamás yo vi, ni ver espero, ni pienso nadie vió, porque tenía y buscaba modos y maneras, y muy sutiles invenciones. . . . Y porque todos los artificios que le veia hacer serían largos de contar, diré uno muy sutil y donoso con el cual probaré bien su suficiencia. En un lugar de la Sagra de Toledo había predicado dos ó tres dias, haciendo sus acostumbradas diligencias, y no le habian tomado bula, ni á mi ver tenian intencion de tomarsela. Y pensando que hacer, se acordó de convidar al pueblo á otro dia de mañana, para despedir la bula. Y esa noche, después de cenar, pusiéronse á jugar la colación él y el alguacil, y sobre el juego vinieron á reñir y á haber malas palabras. Él llamó al Alguacil ladrón, y el otro á él falsario. Sobre esto el Señor Comisario, mi Señor, tomó un lanzón, que en el portal do jugaban estaba. El Alguacil puso mano á su espada, que en la cinta tenia. Al ruido y voces que todos dimos, acuden los huéspedes, y vecinos, y métense en medio; y ellos muy enojados, procurándose desembarazar de los que en medio estaban, para matarse. Ellos, como la gente al gran ruido cargase, y la casa estuviese llena de ella, viendo que no podian afrontarse con armas, decianse palabras injuriosas, entre las cuales el Alguacil dijo á mi amo que era falsario, y las bulas que predicaba eran falsas.

A.—Commercial.

Translate into Spanish:—

1. Settlement of accounts. 2. Withdrawal of a partner. 3. Plain colours. 4. Trade mark. 5. Average price. 6. Carriage paid. 7. Easy terms of payment. 8. We will not limit you as to price. 9. As per account rendered. 10. You can draw upon us for the amount. 11. The shipping trade. 12. The enclosed price list. 13. The recent clearance of stocks. 14. To be paid by the party at fault. 15. A thorough business knowledge. 16. The very best workmanship. 17. We quoted very moderate prices. 18. We hope, and shall endeavour, to make good the loss by some future cargo. 19. Annexed we give you a list of goods from your country which meet with a ready sale here. 20. It is far from our wish to put you to inconvenience.

The reports of the trade of all European countries during the season now ending have generally been quite satisfactory, and the attendance of foreign and home buyers has been good, but all accounts from the United States have come weekly worse and worse, and buyers from that country have almost practically failed at these sales, and orders were so limited that they do not represent a tithe of usual requirements. With this total lack of their support, it is only natural that various declines in values of furs, more or less largely used in that country, should have to be registered.

Translate into English:—

1. Fardo. Abacá. Conocimiento. Deuda pasiva. Atrasos. Reemplazo. Almoneda. Lana cardada. Peones. Fondo de amortizacion. Al contado. Precios regulares. Giro. Pieles. Impuesto. Un empréstito Un pleito.

2. Para informes sobre mis recursos y mis conocimiento mercantiles puedo dirijirle á los Señores.

3. No podemos ejecutar su órden sin la condicion siguiente: que el importe de la factura vaya cargado en el conocimiento para su reembolso.

4. Creo haber obrado en su interés de V. en desviandome de sus instrucciones tocante la via, siendo aquella que he escogido yo la menos costosa.

5. Estamos tanto menos dispuestos á ceder el corretage que hemos calculado demasiado bajo los gastos accesorios.

6. En esta ya no hay grandes existencias de seda, pero aunque las hubiera, ese género es poco solicitado hoy en dia.

7. El comercio de lanas de Leicestershire, esta aún muy deprimido y los negocios son poco satisfactorios en lo que toca á la cantidad y al precio, aunque el consumo señala una expansion firme y seguida. Los negocios en Halifax son muy quietos y se nota una tendencia á la baja en los precios. El mercado ha tenido muy pocos compradores y los negocios, ya sea para esta temporada, ó para la próxima, no tienen indicios de alza.

B.—Technical.

The woollen coat which covers the day-labourer, as coarse and rough as it may appear, is the produce of the joint labour of a great multitude of workmen. The shepherd, the sorter of the wool, the wool-comber or carder, the dyer, the scribbler, the spinner, the weaver, the fuller, the dresser, with many others, must all join their different art in order to complete even this homely production. What a variety of labour, too, is necessary to produce the tools of the meanest of those workmen! To say nothing of such complicated machines as the ship of the sailor, the mill of the fuller, or even the loom af the weaver, let us consider, only, what a variety of labour is requisite in order to form that very simple machine the shears, with which the shepherd clips the wool. The miner, the builder of the furnace for smelting the ore, the feller of the timber, the burner of the charcoal to be made use of in the smelting-house, the brickmaker, the workmen who attend the furnace, the millwright. the forger, the smith must all of them join their different arts in order to produce them.

Translate into English:—

1. Piczas de las locomotoras. 2. Caja de fuego exterior que forma parte de la caldera. 3. Tirantes para fortalecer la caja. 4. Boca de fuego. 5. Parrillas. 6. Ceniceros. 7. Válvula de seguridad muelle. 8. Indicador de cristal y llave de prueba. 9. Silbato de vapor. 10. Cono invertido para interceptar el agua de fomentacion. 11. Varilla que liga el regulador con la manigueta que lo activa. 12. Copa de grasa y su tubo para conducir aceite al regulador. 13. Válvulas, corredoras ó tiradores. 14. Bastidor interior de la maguina. 15. Émbolo de vapor. 16. Cuñas para comprimir el émbolo. 17. Guardas para sus pernos. 18. Vástagos de los émbolos. 19. Guias de las crucetas. 20. Brazos salientes para operar las bombas. 21. Bielas. 22. Eje encigüeñado. 23. Bombas alimentadoras. 24. Ramales de las bombas á la caldera. 25. Tornillos de presión para afirmar los excéntricos á los ejes. 26. Barras de los excéntricos. 27. Eslabones de los remates. 28. Palcancas, ejes y varillas para operar el cambio de marcha. 29. Husos de las válvulas de vapor. 30. Botones en los excéntricos traseros para que actúen los marcos de las correderas de expansión y muchas otras.

C.—Scientific.

Translate into Spanish:—

Experiments have been made on the difference in the light rays radiated by the Welsbach mantles and in the rays obtained from the sunlight mantle. These mantles, when under experiment, were burnt in a chimney which had a window of quartz in it opposite the brightest part of the incandescent mantle, so as to allow of the free transmission of all ultraviolet rays of light, whilst the spectograph in which the spectra were photographed had a complete quartz train consisting of condensers, two double prisms, collimator, and object-glass. Under these conditions photographs were taken on Edwardes' isochromatic films, the experiment being carried out under such similar conditions as to be strictly comparable. Having so arranged the burners and the pressure of gas as to get the best light from each mantle, photographs of the spectra were taken, and in order to fix the wave lengths of any particular part, a spark spectrum of a standard alloy, the lines of which had been carefully measured, was impressed on the plate immediately after the artificial spectrum was photographed.

Translate into English:—

Los productos secundarios de la destilación de la hulla se aprovechan paro varios fines. El cok se vende como combustible de cocina y calefacción: las aguas de depuración, muy cargadas de principios amoniacales, se utilizan por los fabricantes de productos quimicos para convertirlas en sulfato y clorhidrato de amoniaco: el alquitrán destilado con el água produce un accite empireumático, volatil y muy combustible, que sirve para la disolución de las gomas en esta clase de industria. Privado de la mayor parte de este accite, el alquitrán se emplea en la preparación de betunes, con que se hacen impermeables á la humedad las maderas, tejas, ladrillos y otras materias de construcción: mezclads con la resina común úsase en los puertos de mar para el calafateo de buques; en los laboratorios para la fabricación del negro de humo, y en la alfareria para coloración de barros.

ELEMENTARY SPANISH.

[THREE HOURS ALLOWED.]

(Only one Class of certificate is Given in this Subject.)

SECTION I.

Grammatical Questions.

1. State the difference between Haber and Tener.
2. When is el used instead of la?
3. Give the gender of the following nouns:—Drama, mano, voz, dia, poeta, leche, miel, arroz, almacén, flor.
4. Write in Spanish the days of the week, and the months and four seasons of the year.
5. What is the rule for the formation of the plural of nouns?
6. Write the third person singular of all the tenses of the verbs—Estar, Ser, and Hablar.

Translate into Spanish:—

1. The fear of death and the love of life are natural to men.
2. Spain produces wine, corn, and all sorts of fruits.
3. The four elements are air, earth, water and fire.
4. There were many people in the street.
5. My brother's friend has been in the country.
6. I have to speak to you on business.
7. The door of the room is opened.
8. Give me some water, I am thirsty.
9. Whose house is that? Do you know?
10. I know the owner very well.
11. We must prefer the useful to the agreeable.
12. He is ten years younger than I.
13. Has he given it to her?
14. He has recommended her to me.
15. I told him to wait till you came.

Translate into English:—

Hay un mecanismo ingenioso que mide con exactitud el curso del tiempo, regula nuestras ocupaciones, suele acompañarnos á todas partes y forma la base del comercio, riqueza y bienestar de muchos pueblos. Este ingenioso mecanismo es el reloj. De cuantos hombres lo usan, la inmensa mayoria se aprovecha de sus ventajas, ó lo luce como joya preciosa; pero muy pocos son los que han meditado alguna vez la suma de ingenio, de ciencia, de ensayos, de constancia, de siglos; la cantidad, en fin, de civilizacion que ha sido necesaria para producirlo.

La mano de la vigilancia destruye la miseria; la prosperidad accompaña al hombre industrioso.

SECTION II.

Translate into Spanish:—

1. *(a)* Invoice. *(b)* Bill of lading. *(c)* Exchange. *(d)* Warehouse. *(e)* A debt. *(f)* Expense. *(g)* A sample. *(h)* Weight. *(i)* A receipt. *(j)* The sale. *(k)* The seller. *(l)* Insurance.
2. How were the prices of coffee and sugar yesterday?
3. The coffee was dear but the sugar was cheap.
4. When will our agent, at Cadiz, receive the goods?
5. We have sent them by the steamer *Scott* which will arrive in that port on the 15th inst.
6. What manufactures are generally considered the best?
7. English manufactures; they would be still more in demand but for the competition of Germany, whose commodities are cheaper but not so good.
8. The trade here is not so flourishing as formerly?
9. We received the twenty cases of oranges which are not so good as those you sent last week.
10. We have not received an answer to our last letter.

Translate into English:—

1. *(a)* La aduana. *(b)* Los derechos. *(c)* La cuenta. *(d)* El flete. *(e)* La firma. *(f)* Una remesa. *(g)* La subasta. *(h)* El descuento. *(i)* El embalaje. *(j)* Una letra de cambio. *(k)* Una obligación. *(l)* El corredor.

2. Despues de nuestra circular del 8 del corriente, han llegado á este puerto muchos buques del Mar Negro con cargamento de granos de todas clases. Pero los negocios siguen muy paralizados, sin duda porque vendedores y compradores esperan noticias más exactas acerca de cómo se presentan las cosechas en el Norte.

En estos dias las compras han sido tal vez aún de menos importancias que á principios del mes. No hay variación sensible en los precios, pero los trigos de Odesa encuentran siempre más fácilmente compradores que los de Taganrog. La gran cantidad de otras procedencias tuvo que retirarse por no haberse cubierto las posturas.

Examiner's report on the papers worked in 1897.

The papers of the majority showed a very fair knowledge of the Spanish language. I noticed a great improvement in the translation of English into Spanish, which in former years used to be the weakest point.

The result generally indicates a careful training, especially in the portion dealing with commercial technicalities, which shows that the teaching of commercial Spanish is favourably progressing.

The Elementary paper, on the whole, was very satisfactorily done; unfortunately, by mistake, several candidates for the Elementary took the Advanced paper. This may partly account for some of the failures in this class.

PORTUGUESE.

[THREE HOURS ALLOWED.]

NOTE.—*The candidate can, of course, develop his answer to each of the questions put to him, according to the time at his disposal.*

Candidates for a Third-class certificate must take Part I., candidates for a First or Second-class must take the whole of the Paper.

PART I.

1. How many prepositions are there in Portuguese?
2. Write out the imperative of the following verbs:—*Louvar*, *Vender* and *Partir*.
3. Have the verbs *Ter* and *Haver* and *Ser* and *Estar* the same meaning, or what difference exists between them?
4. Write out the first, second and third persons of the following verbs:—*Medir*, *Dizer*, *Perder*, *Valer* and *Pôr*.
5. Convert the following adjectives into their absolute superlative:—*Antigo*, *Amigo*, *Christão*, *Cruel*, *Misero* and *Sagrado*.
6. Which are the interrogative pronouns in Portuguese?
7. How is the plural of the names ending in *al*, *ol*, *ul* formed?
8. Into how many conjugations are the Portuguese verbs divided?
9. Illustrate the use of the articles in Portuguese, their gender and number.
10. Render in Portuguese the following phrases:—(1) It was raining just now. (2) I bought this wine at two shillings a bottle. (3) Is gold better than silver? (4) England has colonies everywhere. (5) The river was two miles broad. (6) There are many soldiers. (7) Please to accept my thanks. (8) In answer to your favour of yesterday.

Translate into English:—

O magnifico tempo que tem corrido permittiu adeantar muito todos os trabalhos ruraes, em frisante contraste com o atrazo, em que se achavam em egual epocha do anno passado.

Apezar da baixa sensivel do preço dos vinhos continua a haver uma verdadeira febre de replantação de vinhas, e ainda bem que assim é, porque, se por um lado não é facil encontrar no nosso paiz cultura que dê

maior lucro ao proprietario, por outro lado, o que é ainda mais importante para o paiz, não ha cultura alguma que empregue durante todo o anno tamanho numero de braços.

A vinha como dizia o dr. Guyot, é a cultura colonizadora por excellencia. Mesmo quando o rendimento liquido por hectare é pequeno, o rendimento bruto é sempre avultado, permittindo portanto que se amiudem os trabalhos, empregando um pessoal numeroso, por salarios elevados.

Não basta porém plantar vinhas, é necessario procurar e desde já ir abrindo, mercados para as fartas colheitas de vinho que brevemenle devemos ter.

Translate into Portuguese:—

A new disease attacking oranges has been discovered in Spain. It resembles mildew and affects fruit, branch, and leaf, which it turns yellow.

The Union Company's steamer *Norman* left Cape Town on the 19th of December, and reached Plymouth at 9.25 p.m. on the third day of this month. The time occupied from port of departure to port of arrival was 14 days 21 hours. This is the second best run that has been made from the Cape.

A shark was captured lately at Guadalup, and when it was opened its stomach was found to contain a package of inventories, invoices, and other documents belonging to the steamer *Copac* of the New York line. The papers were lost on her voyage in 1893.

PART II.

Translate into English:—

Tornar o vidro infusivel não é um problema commum; entretanto parece que está em via de resolução ou pouco menos. O "Franklin Institute" de Philadelphia effectuou ha pouco, a pedido da Associação dos Seguros Contra Incendios, umas experiencias no sentido de determinar as diversas condições de resistencia ao calor do vidro contendo na sua espessura uma rede de fios metalicos.

Resulta d'estas experiencias que esse vidro supportaria, sem entrar em fusão, nem mesmo se quebrar quando o mergulham em agua fria, uma temperatura muito mais elevada que o vidro ordinario.

Os americanos vão construir uma ponte gigantesca sobre o braço septentrional do rio Hudson.

Os pilares terão approximadamente 250 metros de altura.

Os alicerces serão de 42 metros de profundidade.

O enorme afastamento dos pilares, permittirá aos maiores navios passar sem difficuldade sob a ponte.

O magnesio empregado na luz artificial applicada na photographia á noite, parece que em breve será substituido pelo alluminio, que segundo nos affirmam dispõe de maior poder illuminante e é exempto do cheiro desagradavel derivativo da combustão do magnesio.

Translate into Portuguese:—

Puerto Rico, 30*th November*, 189 .

DEAR SIR,—Referring to your esteemed favour of the 10th inst., we have much pleasure in informing you of the present state of this market.

The merchants of the Peninsula cannot hope to trade in the colonial products of the recent harvest at prices any lower than they stand at present. The demand every season is greater and the crops continually give less promise of being abundant.

The drought, we have just experienced, has done much harm to the sugar cane, especially in the district of Mediodia, and the want of hands has been, and is, severely felt in the sugar plantations. Cholera and fever have made a devastation amongst the poor negroes, although the proprietors fulfil their duty towards that race. If sugar in general has suffered from these causes, coffee for the same reason has certainly done so no less. In conclusion, we have only to state that tranquility reigns in the island, and no political crisis overshadows us, and we are considerably more contented by the aspect the sanitary condition of affairs has taken.

Translate into English:—

O Japão, o *sol nascente* do extremo oriente, não só mostra o seu valôr nas armas, vencendo o Celeste imperio, antigo e poderoso rival de tantos seculos, como se encaminha a concorrer pela industria e pelo commércio com a Europa e a America.

O impulso que teve a industria japoneza, em menos de um quarto de seculo, é verdadeiramente prodigioso; cidades que ontr'ora contavam muitos milhares de almas e que tinham decahido extraordinariamente, levantaram-se rapidamente; estão cercadas hoje por officinas, fabricas, altas chaminés que enchem o horisonte de fumo, onde so produz tudo: papeis de todas as qualidades, tecidos de lã e algodão, quinquilherias, cervejas, sabonetes de todas as qualidades, phosphoros, wagons de caminhos de ferro, guarda chuvas, candeeiros de petroleo, globos eletricos, espingardas, peças de artilheria, etc.

As fabricas de fiação de algodão pagam aos accionistas de 10 a 25 p. c. de dividendo. Ha no paiz 14 a 15,000 sociedades industriaes, 100 bancos nacionaes, 11 sociedades de luz electrica, numerosas companhias de caminhos de ferro, de transporte, de navegação, grandes bolsas de commercio, e milhares de estabelecimentos.

Translate into Portuguese:—

A substitute for the rifling of cannon, which is the chief cause for the great cost of modern guns, has been devised by Mr. X., a well-known engineer, who also expects to put an end to the deterioration of the bore due to the combustion of gases which the new powders develop. He fits the projectile with gas checks, which prevent the passage of any gases, and give to it a rotary movement which is now obtained by rifling the barrel, by a mechanical device, which gives the twist to the gun itself at the moment of firing.

Another latest development of the art of destruction is the "capped projectile." Hard metal projectiles are liable to be shattered on striking an armour plate. By a converse process, the soft metal cap has been placed on the nozzle of the projectile, which, thus armed, has penetrated plates against which the best shot have been shattered. Experiments have been carried out, both in Russia and the United States.

Examiner's report on the papers worked in 1897.

It is surprising to see that most of the candidates went up this year for First-class certificates, and although some of them have failed to obtain that distinction, yet I am pleased to say, that on the whole, the work is very satisfactory. I am sorry I have to state that some of the candidates have not given their attention to the recommendation given in my preceding reports. Had they done so, they might have avoided confusing the Portuguese and the Spanish languages, which, they should bear in mind, are very different. This confusion is responsible for the three failures tnis year.

In conclusion, all of the candidates classified this year, are, in my opinion, very conversant with the Portuguese language, and they have evidently done their best to carry out the programme presented to them.

RUSSIAN.

(*No Examination was held in this subject.*)

DANISH.

(*No Examination was held in this subject.*)

CHINESE.

(No Examination was held in this subject.)

JAPANESE.

(No Examination was held in this subject.)

DOMESTIC ECONOMY.

[THREE HOURS ALLOWED.]

I. Who is the proper person to manage the home? and how should one set about learning the science of Domestic Economy?

II. What is the first thing to be attended to to keep the body in health? What are the principal kinds of food required and why?

III. Describe the process of digestion. Why is hot food better than cold?

IV. How should a baby of a year old be fed? and how should it be clothed? Give your reasons for your answers.

V. What are the chief evils of modern dress? What materials are best suited for hot climates and what for cold?

VI. How would you prepare a sick room for a case of scarlet fever? What disinfectants do you recommend? What is the normal temperature of our bodies?

VII. How should our living rooms be ventilated? How many cubic feet of air should be allowed for each person in workrooms?

VIII. If you were having a house built, what aspect and site should you choose? How would you have it drained?

IX. How should flannels be washed? What clothes must be ironed and what mangled?

X. What are the chief substances used for fuel? What is coal? How long has it been in general use?

Examiner's report on the papers worked in 1897.

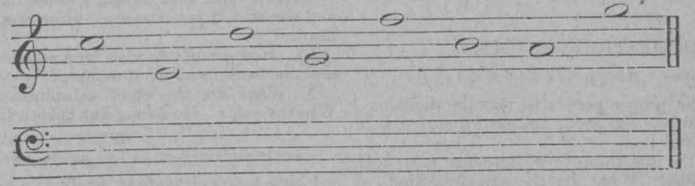
I have much pleasure in sending in my report on the papers worked this year in Domestic Economy. The standard is so definitely higher than on former occasions, that the conclusion arrived at seems to be that the instruction in the subjects for examination must be vastly superior to that of earlier days. Even the very few candidates who have failed to satisfy me seem to have gleaned *some* knowledge of this subject.

The two papers recommended for medals are so really *excellent* as to deserve special notice.

RUDIMENTS OF MUSIC (ELEMENTARY CERTIFICATE).

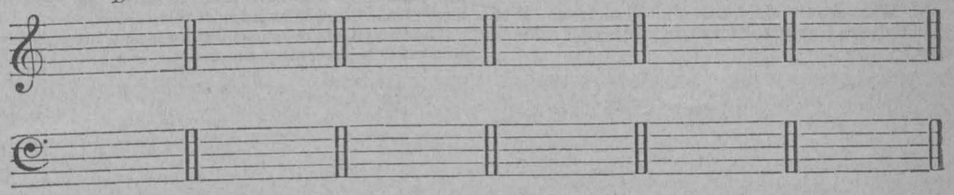
[TWO HOURS ALLOWED.]

1. Re-write the following in the Bass clef, to sound two octaves lower than here written :—

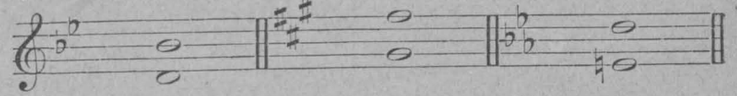


2. Write the signatures of each of the following major keys in the Treble and the Bass clefs :—

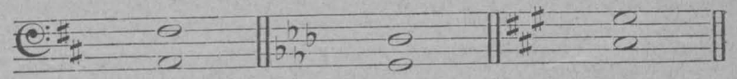
D E♭ E F F♯ G



3. Name the following Intervals :—



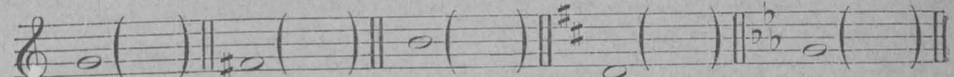
Ans.



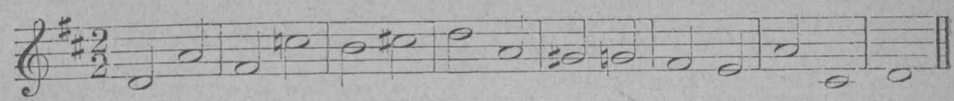
Ans.

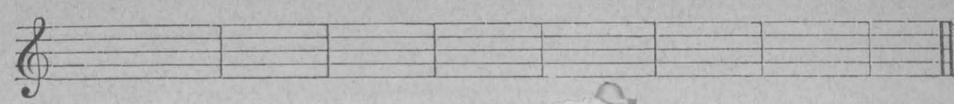
4. Write the following Intervals above the notes given :—

Minor 6th. Perfect 4th. Perfect 5th. Minor 7th. Dim. 5th.

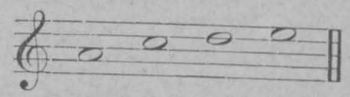


5. Transpose the following passage a minor 2nd higher—viz., into the key of E♭ :—



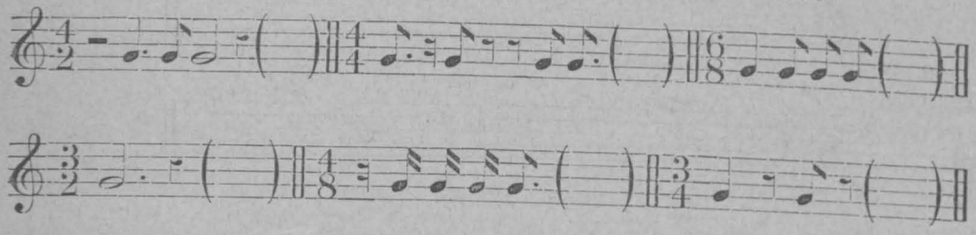


6. In which major keys are all the following notes diatonic?

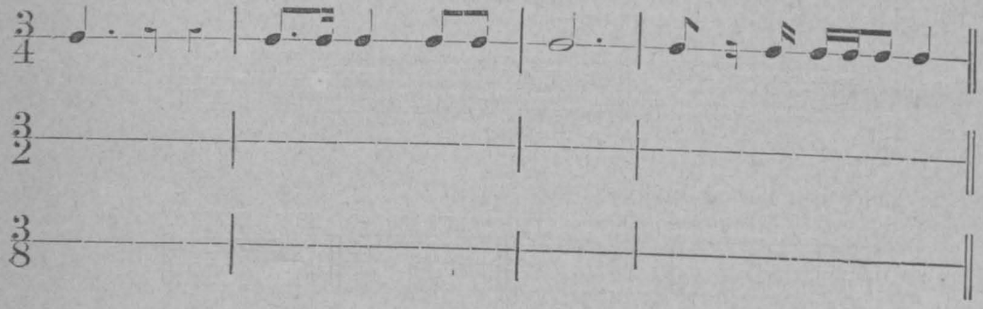


Ans.

7. Complete each of the following bars by adding one note at the end :—



8. Re-write the following in $\frac{3}{2}$ time, doubling the value of every note and rest; and again in $\frac{3}{8}$ time, halving the value of every note and rest :—



9. State the meanings of the following terms :

Answers.

(*a*) *Con moto.* (*a*).....

(*b*) *Maestoso.* (*b*).....

(*c*) *Allegretto.* (*c*).....

(*d*) *Diminuendo.* (*d*).....

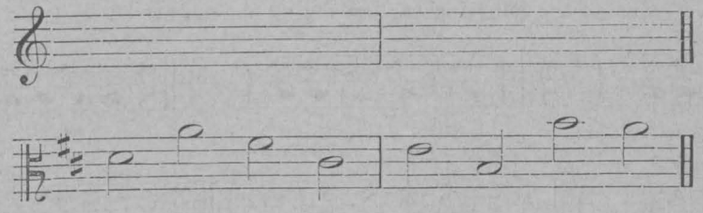
(*e*) *Rallentando.* (*e*).....

(*f*) ♩= M. 54. (*f*).....

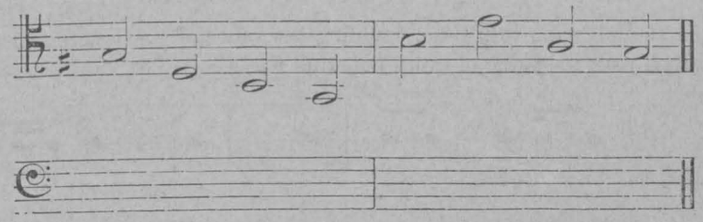
RUDIMENTS OF MUSIC (HIGHER CERTIFICATE).

[TWO HOURS ALLOWED.]

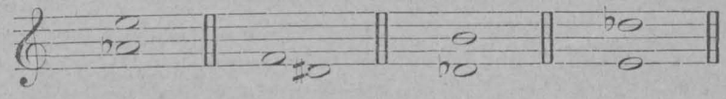
1. Re-write the following passage at the same pitch in the Treble clef (adding the signature) :—



and the following at the same pitch in the Bass clef (adding the signature) :—



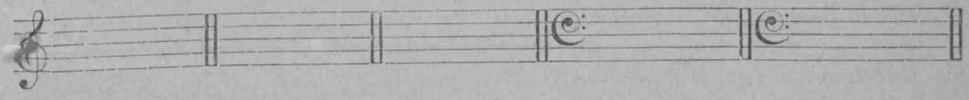
2. Name the following Intervals :—



Ans.

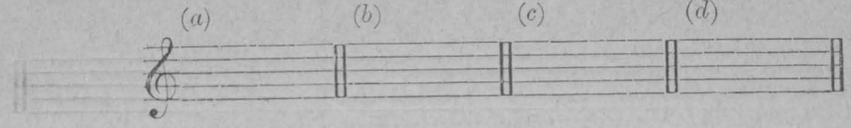
3. Write the signatures of the following minor keys :—

B minor. F♯ minor. E minor. A♭ minor. G♯ minor.

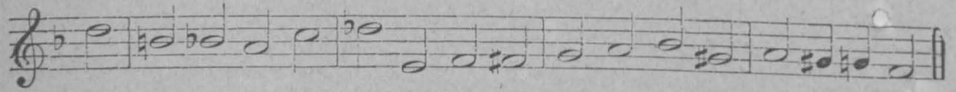


4. Write (*a*) the augmented 2nd found in the scale of B minor; (*b*) the augmented 5th found in the scale of B♭ minor; (*c*) the diminished 4th found in the scale of G minor; and (*d*) the diminished 7th found in the scale of G♯ minor :—

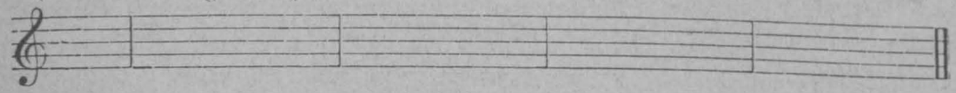
(*a*) (*b*) (*c*) (*d*)



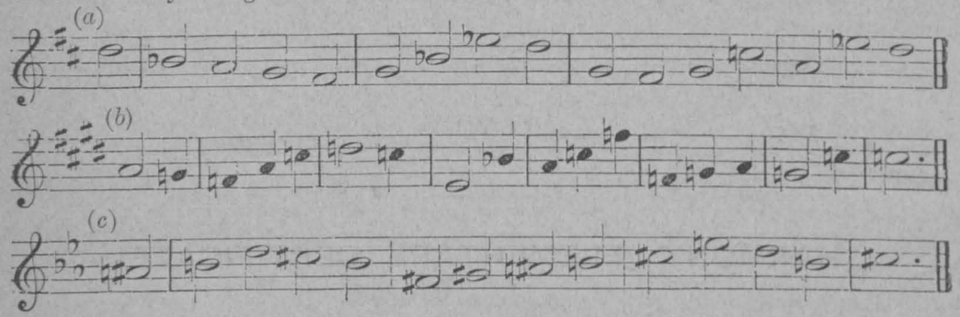
5. Transpose the following passage a minor 3rd lower :—



(Add the new signature.)



6. State the key of each of the following passages. Each passage is to be considered to be in one key throughout :—

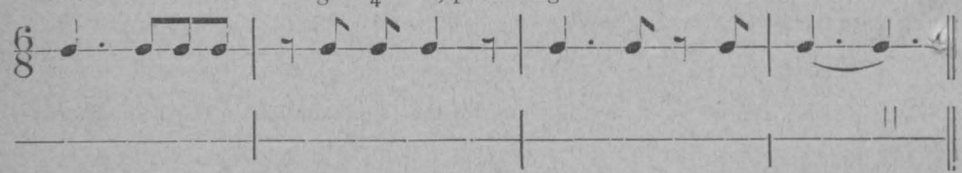


Ans. (*a*)..... (*b*)..... (*c*).....

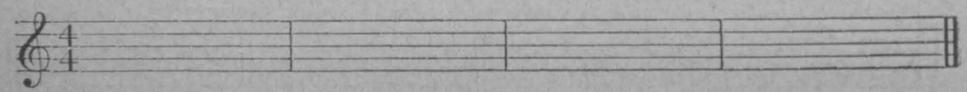
7. Bar the following notes in accordance with the time-signatures. Each passage commences a bar :—



8. Re-write the following in $\frac{2}{4}$ time, preserving the relative duration and accent :—



9. Write four bars of $\frac{4}{4}$ time, introducing Syncopation twice in each bar. Use no notes shorter than quavers.



10. State the meanings of the following terms, etc. :—

Answers.

(*a*) *Vivace.* (*a*).....

(*b*) *Legato.* (*b*).....

(*c*) *Dolce.* (*c*).....

(*d*) *Calando.* (*d*).....

(*e*) Dominant. (*e*).....

(*f*) Major Scale. (*f*).....

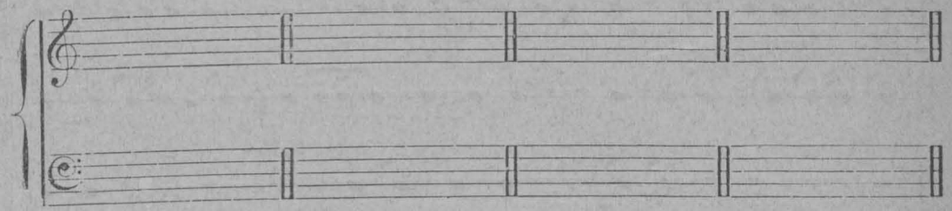
(*g*) ♩.=M. 70. (*g*).....

HARMONY (ELEMENTARY CERTIFICATE).

[THREE HOURS ALLOWED.]

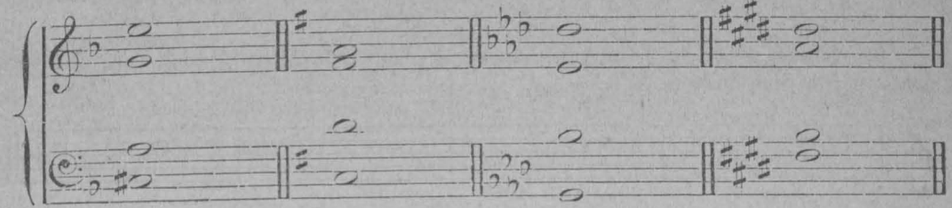
1. Write in Short Score the following chords in four parts :—

1st inversion of B minor. | 2nd inversion of the Dominant 7th of Key A. | 2nd inversion of F minor. | 2nd inversion of the Dominant 7th of Key B♭.

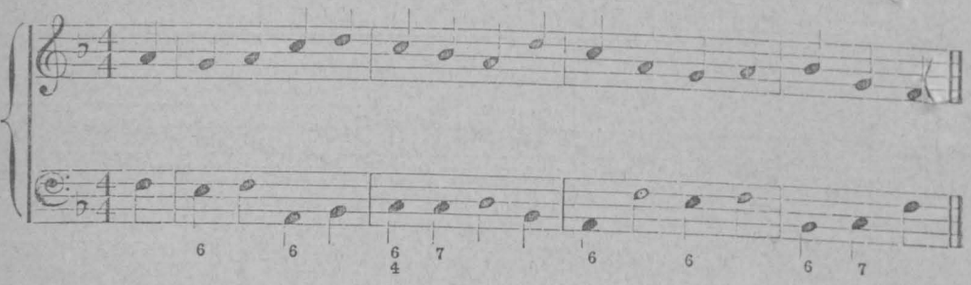


(Figure the Bass.)

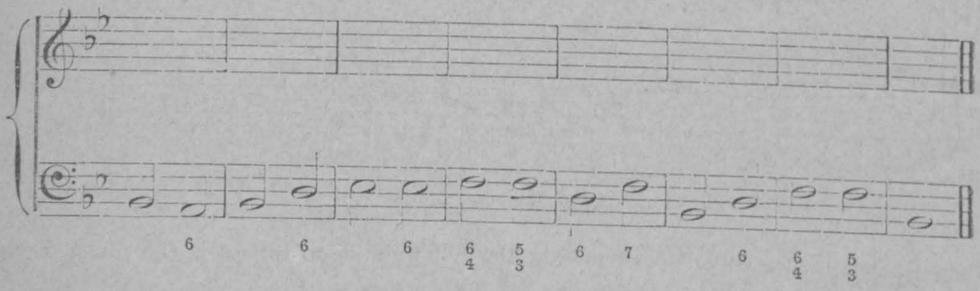
2. Resolve each of the following chords of the Dominant 7th on the Tonic chord :—



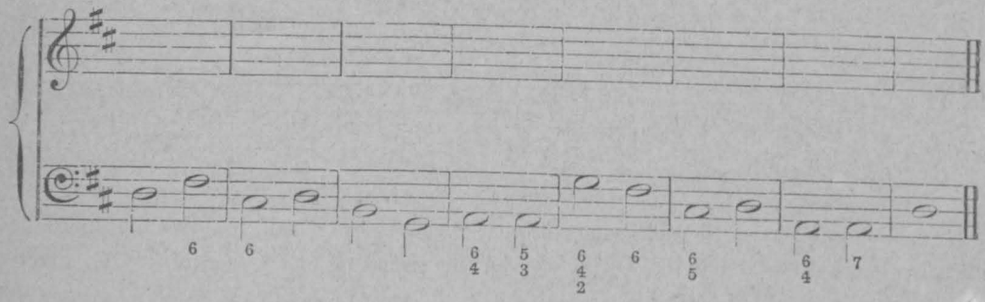
3. Add Alto and Tenor to the following Treble and Bass, in accordance with the figuring given or implied. The complete four parts to make a Short Score :—



4. Add Treble and Alto parts (both on one stave) over the following figured Bass :—



5. Add Treble, Alto, and Tenor above the following figured Bass. Write in Short Score :—

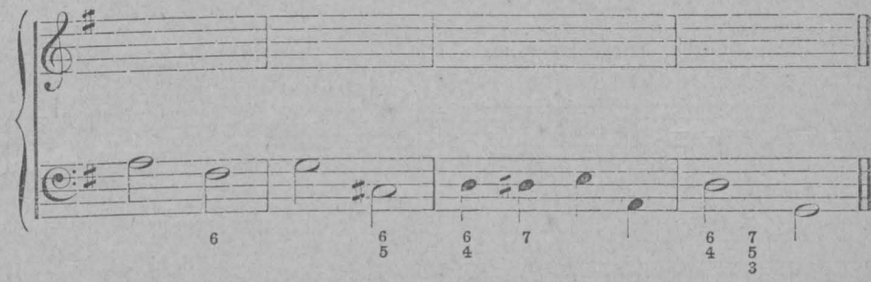


HARMONY (HIGHER CERTIFICATE).

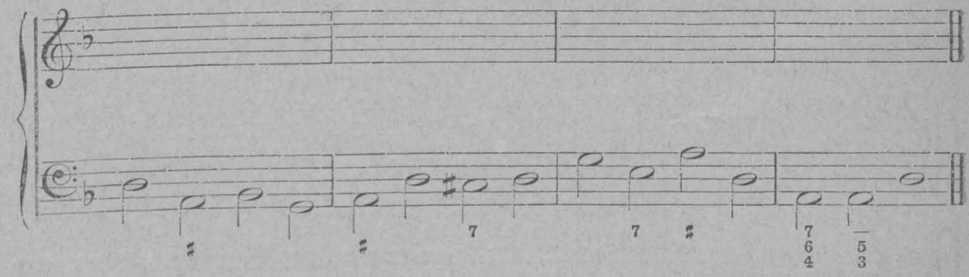
[THREE HOURS ALLOWED.]

1. Add Treble, Alto, and Tenor, over the following figured Bass. Passing-notes may be used. Write in Short Score :—

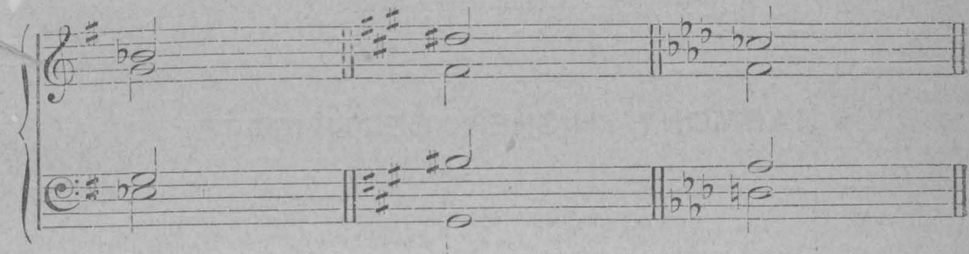




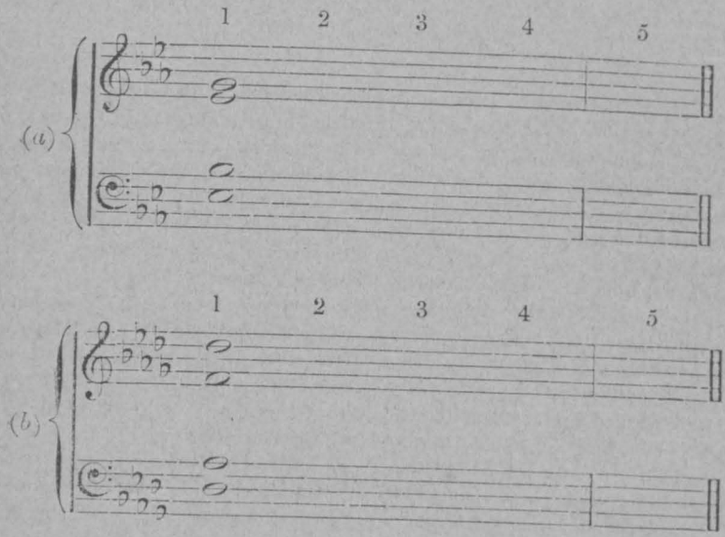
2. Add Treble, Alto, and Tenor over the following figured Bass in the minor key. Write in Short Score :—



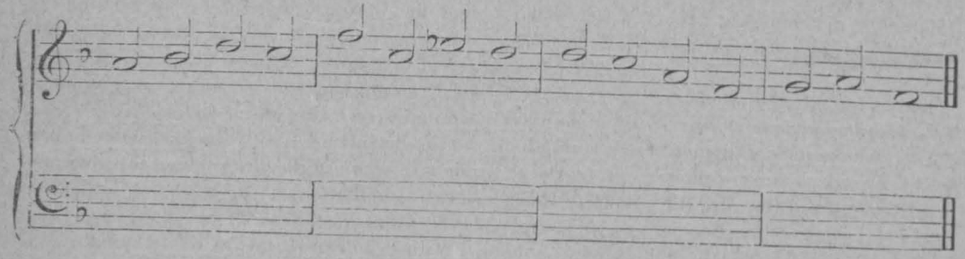
3. Follow each of the following chromatic chords by a suitable diatonic chord or discord that will establish the key shown by the signature. The accent of the given chord may be altered if desired :—



4. Write chords under 2, 3, 4, and 5, so as to modulate to the key of F minor at the fifth chord :—



5. Harmonize the following Melody (for S.A.T.B.). Passing-notes may be used. Write in Short Score :—



Examiner's report on the papers worked in 1897.

HARMONY.

Elementary Certificate.—On the whole a satisfactory batch of papers. The weak features that occasioned failure were generally in the clumsy part-writing in the "filling in" exercises. Three-part writing, which has special points for consideration, had not been sufficiently studied by a good many candidates.

Higher Certificate. — There were many creditable workings of these questions. The first figured bass exercise was a great trouble to a number of candidates, but more lost marks on the question on the progression of chromatic chords. As there are only about eight or ten such chords in ordinary use, it is hard to understand why a student ambitious enough to sit for a "higher" certificate should not take the trouble to ascertain their common treatment by harmony teachers and composers. As usual, the harmonisation of a given melody exposed the weakness of many otherwise excellent candidates. It was again evident that "filling in" exercises had occupied a disproportionate amount of the time devoted to study. After learning the rules of progression and part-writing it is not too much to say that a student should spend three-fourths of the time allocated to the whole study to the practice of harmonising melodies.

RUDIMENTS OF MUSIC.

Elementary Certificate.—A fair proportion of the candidates sent in well-worked papers. But it was evident that many were not not at all well prepared for the examination. Inability to write the signatures of major keys, and to name common diatonic intervals, must, of course, result in failure, however well other parts of the paper may be worked. The transposition exercise often gave trouble. Every elementary student should know how to transpose simple melodies.

Higher Certificate.—About two-thirds of the candidates passed successfully. Those who failed lost marks over the questions on minor key signatures, chromatic intervals, transposition, and the naming of the keys of given passages. Not a few had apparently no notion of the meaning of the word, "syncopation," or, at least, no power to construct an illustration of this rhythmic effect.

EXAMINATIONS OF THE SOCIETY OF ARTS.

From a paper read by SIR HENRY TRUEMAN WOOD *before the International Congress on Technical Education, June,* 16, 1897.

The Society's Examinations are conducted simultaneously at a number of different centres throughout the kingdom, through the agency of local examination committees established for the purpose by the Society. The papers in each subject are sent down in separate envelopes to the secretary of the committee immediately preceding the day of examination. The envelopes are opened in the presence of the candidates, and the papers distributed. The worked papers are sealed up at once and dispatched to the office of the Society. In the present year, 1897, 7,513 papers were worked by 6,919 candidates at 221 centres. The subjects in which examinations are now held are :—1. Arithmetic ; 2. English ; 3. Book-keeping ; 4. Commercial Geography ; 5. Shorthand ; 6. Type-writing ; 7. Economics ; 8. Précis-writing ; 9. French ; 10. Elementary French ; 11. German ; 12. Elementary German ; 13. Italian ; 14. Spanish ; 15. Elementary Spanish ; 16. Portuguese ; 17. Russian ; 18. Danish ; 19. Chinese ; 20. Japanese ; 21. Domestic Economy ; 22. Rudiments of Music ; 23. Harmony ; 24. Practice of Music.

The examination system of the Society of Arts was an outcome of the Great Exhibition of 1851, which, as is well known, was originated by the Society.

In November, 1851, Mr. Harry Chester, then a Vice-President of the Society and afterwards Chairman of the Council, submitted to the Council a scheme for the formation of a union of mechanics' institutions, the principal object of which was to encourage the founding of such institutions, and to develop the educational facilities which they provided.

Among the early suggestions for the utilisation and development of such institutions was a proposal for a general system of examinations among their members. In December, 1853, Mr. Chester definitely proposed the establishment of such a system, and in the spring of 1854 a scheme of examinations was published. The scheme was of a very comprehensive character, and included the following subjects : —1. Mathematical Sciences ; 2. Experimental Sciences ; 3. Sciences of Observation ; 4. Mechanical Sciences ; 5. Social Sciences ; 6. Fine Arts ; 7. Moral and Metaphysical Sciences ; 8. Literature. This very elaborate programme proved a little impracticable, and it is not to be wondered at that only a single candidate offered himself for examination in March, 1854. The promoters of the movement were not, however discouraged, the scheme was remodelled, principally by Dr. Booth, at that time an active member of the Society, and in 1856 an examination of 52 candidates was held at the Society's house. The subjects of this first examination were :—1. Book-keeping ; 2. Arithmetic ; 3. Algebra ; 4. Mensuration ; 5. Geometry ; 6. Mechanics ; 7. Chemistry ; 8. Animal Physiology ; 9. Botany ; 10. Agriculture ; 11. Geography ; 12. Physical Geography ; 13. English History ; 14. English Literature ; 15. Latin and Roman History ; 16. French ; 17. German ; 18. Freehand Drawing.

In the following year, 1857, the first attempt at provincial examinations was made, and an examination was held at Huddersfield, as well as in London, the examiners of the Society going down for the purpose. The desire of increasing the number of examination centres, and the obvious impossibility of sending examiners simultaneously all over the country, led in 1858 to the elaboration of the system of local committees to supervise examinations worked from a single centre.

The Society of Arts, however, cannot claim the sole credit of the invention of the system of local examinations. In 1850 the College of Preceptors (established in 1846) was considering the best means of examining the schools of its members. It commenced by sending down examiners, but in 1853 the experiment was tried of collecting pupils to a centre and examining them by means of papers sent down from London. The experiment proving successful, the system was regularly organised in the following year, 1854, and has been continued ever since.

It will be seen that the College of Preceptors' Examinations preceded those of the Society of Arts by two years, but the objects, the conditions, and the methods of the two systems have been so different that there has never been any but the most friendly rivalry between them. In 1856 a conference was held at the Society's house between representatives of the two bodies, the College being rather afraid that the Society's Examinations would interfere with their own. It was soon apparent that the two systems were intended to occupy

different ground, and were not likely to affect one another. In practice this has proved to be the result, and it has never been found that the two systems have interfered in the least with one another.*

To the Society's Examinations in 1858, 58 institutions sent up 288 candidates; in the following year there were 480; in 1860, 586. The numbers increased steadily till 1865, when there were 1,899; the next year showed a slight diminution, and then there was a further increase, till the number of 2,160 was reached in 1869.

The University Local Examinations were established in 1858. The establishment of Elementary Drawing Examinations by the Department of Science and Art was about contemporaneous with that of the Society's Examinations. The Science Examinations began later, in 1861, and as these developed, it was found that the Society's Examinations were in many respects competing with those of the Department. The same candidates were being examined in the same subjects, and there was an evident waste of power. In 1870 this led to the abandonment of 17 out of the 36 subjects then included.

In 1871, when the Council were considering the establishment of a system of Technological Examinations, they passed a resolution to discontinue the General Examinations, but on the application of some of the more important of the Institutions in Union, they rescinded the examinations resolution and determined to continue for a further period. This was done, on the same system as before, till 1876, when the programme was revised, and the plan on which certificates were granted was somewhat modified. Previously, certificates had been granted for single subjects, but in that year a "Commercial Certificate" was established in addition, to take which it was necessary to pass in, at least, three subjects. Very few of these certificates were ever taken, the system of single certificates for single subjects being more popular and better suited to the needs of the class of students who take up the Society's Examinations.

In 1879, the question of abandoning the examinations again rose, it being thought that the ground was covered by other agencies. To quote from the report of the Examination Committee in 1879:—

"The Committee feel that the time has now come when the Society should cease to compete with other educational agencies more influential in the work of examination. With the Educational Department examining millions of children in elementary schools, and thousands of young persons in night classes; with the Universities holding their local examinations throughout the country, for young persons of a higher class; with the Science and Art Department examing students in every branch of science and art; with the new City Institute developing yet further the Technological Examinations just handed over to them by the Society; with other agencies, such as the College of Preceptors, doing kindred work, the Society of Arts may well retire from the field, having in all these various directions acted as the pioneer. It held science examinations before the Science Department, examinations in literature before the Universities went afield to meet the classes who could not go to Oxford or to Cambridge. It has seen the system it established develop, with the aid of Government funds, as it could never have grown without such help, and the time has now arrived when it may cease to compete with the agencies it has done so much to foster."

In pursuance of the course mentioned in this report, no examination was held in 1881, but again, however, some of the institutions where the examinations were held protested, and on further consideration it was determined to continue the examinations, but to try whether they could not be made self-supporting. Hitherto they had been free. In 1882 a fee of 2s. 6d. was charged to each candidate, and this charge has been continued to the present date. The "Commercial Certificate" was abandoned and the old system was resumed of giving a separate certificate for each subject. The natural result was a considerable falling off in the numbers examined. In 1882 only 695 papers were worked as compared with 2,325 in 1880. The numbers, however, soon began to increase again. In 1890 there were 2,474; in 1894, 4,375; in 1895, 5,108, and in the present year, 7,513. This very considerable increase is doubtless, to a very great extent, due to the fact that the County Councils have now large funds available for the promotion of technical education; and that certain commercial subjects are scheduled by the Science and Art Department as subjects coming within the scope of the Technical Instruction Act, 1889. The commercial subjects so scheduled are precisely those in which the Society of Arts has now for just forty years been holding examinations.

The Technological Examinations, referred to above, were instituted in 1873, at the suggestion of Sir John Donnelly, and were handed over in 1879 to the City and Guilds of London Institute, which was founded for this purpose.

*The writer of this memorandum may be permitted to mention that he was for a short time one of the examiners of the College.

CASSELL'S EDUCATIONAL WORKS.

LANGUAGES.

Cheap Edition. Just Issued. Parts I. and II., each containing 248 pp., crown 8vo, cloth, 1s. 6d. each. Complete in one vol., 496 pp., 2s. 6d. KEY, 1s. 6d.

Cassell's Lessons in French. By LOUIS FASQUELLE, LL.D. Revised by Prof. DE LOLME, and corrected according to the latest edition of the Dictionary of the French Academy, and considerably Enlarged by Prof. E. ROUBAUD, B.A., Paris.

"The student who wishes to obtain a thorough knowledge of French, whether for examination purposes or in order to be able to write and speak the language, cannot do better than work through the course set forth in these books."—*School Times.*

Cheap Edition. Just Issued. Price 2s.

Cassell's Italian Lessons, with Exercises and Passages for Translation, By A. J. BUTLER. 3s. 6d.

"This excellent little volume, being intended for self-tuition, is admirably adapted for its purpose."—*The Athenæum.*

490th Thousand. Cloth, 3s. 6d.

Cassell's French Dictionary: French-English and English-French.

"Cassell's French Dictionary has become a standard work in this country, being used in the best schools, recommended by many of the first professors of the day, and generally found a reference book of the highest value and importance."—*Daily Chronicle.*

Cassell's Public-School French Reader. Grammatically Graduated. With Complete Etymological Vocabulary and Notes. 2s. 6d.

Cheap Edition. Cloth, 3s. 6d.

Cassell's German Dictionary. 207th Thousand.

"To say this is the best of the smaller German Dictionaries in the field is faint praise, and were it not for the special merits of one or two, we might, without exaggeration, say that Miss Weir is first and the rest nowhere."—*Journal of Education.*

German Reading, First Lessons in. By A. JAGST, of the Princess Helena College, Ealing. A Graduated Course of Lessons in Verse and Prose, with Vocabularies, &c. Crown 8vo. Illustrated throughout. 1s.

Cheap Edition. 102nd Thousand. 3s. 6d.

Cassell's Latin Dictionary: Latin-English and English-Latin.

"The new and revised edition of this dictionary is a marvel of cheapness."—*Board Teacher.*

The New Latin Primer. By Prof. J. P. POSTGATE. 2s. 6d.

The First Latin Primer. By the same Author. 1s.

Latin Prose for Lower Forms. Being a Series of Exercises adapted to the New and First Latin Primers. By M. A. BAYFIELD, M.A. 2s. 6d.

ENGLISH.

Cassell's English Dictionary. Together with American Words and Forms, Technical Terms, Colloquial and Slang Expressions, Obsolete and Archaic Words—the whole based upon the "Encyclopædic Dictionary." Edited by JOHN WILLIAMS, M.A., Oxon, Editor of the "Encylodædic Dictionary." 1,100 pp., demy 8vo. Cheap Edition, 3s. 6d.; Superior Edition, 5s.

The Story of English Literature. By ANNA BUCKLAND. Adopted by the London School Board as a Reading Book at the Pupil Teachers' Centres.

"With great taste, judgment, and skill. Miss Anna Buckland has told the fascinating story of our English literature."—*Literary World.* Cheap Edition. Cloth boards, 3s. 6d.

Thirty-first Thousand. 7s. 6d.

A First Sketch of English Literature. By PROF. HENRY MORLEY.

"Full of admirable matter, carefully arranged, simple and manly in style, accurate in detail, it forms a summary of special value to the student, and which every reader may consult with advantage."—*Spectator.*

SCIENCE.

Fourth and Cheap Edition. Just Issued. 2s. 6d.

This World of Ours. By H. O. ARNOLD-FORSTER, M.P. Being Introductory Lessons to the Study of Geography. Fully Illustrated.

"It is vivid, clear, and stimulating in a way far beyond that of the books which usually are put into the hand of the school boy and school girl, and to the teacher it is extremely suggestive and helpful."—*Journal of Education.*

Revised Edition. 5s.

Elementary Physiology for Students. By ALFRED T. SCHOFIELD, M.D., M.R.C.S., &c. Designed as a manual to meet all the requirements for passing the Examinations of the Colleges of Physicians and Surgeons, as well as the "Advanced" and "Honours" Examinations of the Science and Art Department.

Specimen pages of the above works will be sent, together with Cassell's Educational Catalogue, Post-free on application.

CASSELL AND COMPANY, LTD., LUDGATE HILL, LONDON.

Book-keeping Made Easy:

SINGLE AND DOUBLE ENTRY.

WITH PRACTICAL ILLUSTRATIONS.

— BY —

W. J. GREENWOOD,

Lecturer on Accountancy, F.N.P.S., Author of "Commercial Correspondence in Phonography."

THIRD EDITION. 1s.

Specially prepared for Society of Arts exams. Prize of 50s. for Students.

The Typists' Manual.

AN ELEMENTARY TEXT-BOOK

FOR

COMMERCIAL STUDENTS.

BY

E. COLLYNS,

Head Teacher of Typewriting to the Manchester School Board, and late Typist to Messrs. Snell and Sons, Shorthand Writers of London and Manchester.

PRICE TWO SHILLINGS.

Commercial Correspondence,

By W. J. GREENWOOD,

Commercial Lecturer on the French and Spanish Languages, Accountancy, Business Routine, and Phonography, at the Lower Mosley Street Schools, Manchester, and the Technical Schools of Stalybridge and Dukinfield.

Indispensable for the Shorthand, Typewriting, and English examinations of the Society of Arts. Extracts set as tests at the recent exams.

"Teachers in commercial schools and classes, as well as examination students, will find in this book a great amount of valuable material and practical help and guidance."—THE EDUCATIONAL REVIEW.

THE

Typists' Advanced Manual.

A Practical Guide for all classes of Copying applicable to any make of Typewriter.

BY

E. COLLYNS,

Author of the "Typists' Manual."

Specially adapted for the use of Advanced Students in Commercial Schools, Evening Schools, and for Self-Instruction. Also for preparation for the Society of Arts, the Typists' Union, and other Typewriting Examinations.

PRICE 4/6.

JOHN HEYWOOD, LONDON & MANCHESTER.

Society for the Encouragement of Arts, Manufactures, and Commerce,

PRIZES FOR DESIGNS FOR FURNITURE.

The Council of the Society of Arts hold a sum of £400, the balance of the subscriptions to the Owen Jones Memorial Fund, presented to them by the Memorial Committee, on condition of their spending the interest thereof in Prizes to "Students of the Schools of Art, who in annual competition produce the best designs for Household Furniture, Carpets, Wall-papers, and Hangings, Damasks, Chintzes, &c., regulated by the principles laid down by Owen Jones."

The prizes will be awarded on the results of the Annual Competition of the Science and Art Department. Competing designs must be marked "In competition for the Owen Jones Prizes."

No candidate who has gained one of the above prizes can again take part in the competition.

The next award will be made in 1898, when six prizes are offered for competition, each prize to consist of a bound copy of Owen Jones' "Principles of Design," and the Society's Bronze Medal.

e has now come
her

HENRY TRUEMAN WOOD,

Secretary.

August, 1897.

MESSRS. BELL'S EDUCATIONAL BOOKS.

Suitable for the Society of Arts Examinations.

COMPLETE CATALOGUE POST FREE ON APPLICATION.

ARITHMETIC.

Works by C. Pendlebury, M.A.

Arithmetic. With Examination Papers and 8,000 Examples. By CHARLES PENDLEBURY, M.A., F.R.A.S., Senior Mathematical Master of St. Paul's, Author of "Lenses and Systems of Lenses, treated after the manner of Gauss." 9th edition. Crown 8vo. Complete, with or without Answers, 4s. 6d. In Two Parts, with or without Answers, 2s. 6d. each. Key to Part II. 2nd edition. 7s. 6d. net.

Examples in Arithmetic. Extracted from Pendlebury's Arithmetic. With or without Answers. 9th edition. Crown 8vo. 3s., or in Two Parts, 1s. 6d. and 2s.

Examination Papers in Arithmetic. Consisting of 140 papers, each containing 7 questions; and a collection of 357 more difficult problems. 3rd edition. Crown 8vo. 2s. 6d. Key, for Tutors only, 5s. net.

ENGLISH.

Works by C. P. Mason, B.A., F.C.P.

First Notions of Grammar for Young Learners. Fcap. 8vo. 105th thousand. Cloth. 1s.

First Steps in English Grammar, for Junior CLASSES. Demy 18mo. 59th thousand. 1s.

Outlines of English Grammar, for the Use of JUNIOR CLASSES. 19th Edition. 107th thousand. Crown 8vo. 2s.

English Grammar; including the principles of GRAMMATICAL ANALYSIS. 38th edition, revised. 163rd thousand. Crown 8vo. Green cloth. 3s. 6d.

A Shorter English Grammar, with copious and carefully graduated Exercises, besed upon the author's English Grammar. 11th edition. 52nd thousand. Crown 8vo. Brown cloth. 3s. 6d.

Practice and Help in the Analysis of Sentences. Price 2s. Cloth.

English Grammar Practice, consisting of the Exercises of the Shorter English Grammar published in a separate form. 3rd edition. Crown 8vo. 1s.

BOOK-KEEPING.

Specially adapted for Society of Arts Examinations.

Examination Papers in Book-keeping. Compiled by JOHN T. MEDHURST, A.C.C., F.S.S., Fellow of the Society of Accountants and Auditors, and Lecturer at the City of London College. 4th edition. Crown 8vo. 3s. Key, 5s. net.

Key. Containing Full Profit and Loss Accounts and Balance Sheets, also the Trading Account, Profit and Loss Account, and Balance Sheet of the Society of Arts Paper for 1897.

FRENCH.

Works by F. E. A. Gase.

First French Book; being a New, Practical, and Easy Method of Learning the Elements of the French Language. Reset and thoroughly revised. 116th thousand. Crown 8vo. 1s.

Second French Book; being a Grammar and Exercise Book, on a new and practical plan, and intended as a sequel to the "First French Book." 55th thousand. Fcap. 8vo. 1s. 6d.

Key to First and Second French Books. 7th edition. Fcap. 8vo. 3s. 6d. net.

French Fables, for Beginners, in Prose, with an Index of all the Words at the end of the work. 17th thousand. 12mo. 1s. 6d.

Select Fables of La Fontaine. 19th thousand. Fcap. 8vo. 1s. 6d.

Histoires Amusantes et Instructives; or, Selec- tions of complete Stories from the best French modern authors, who have written for the young. With English notes. 17th thousand. Fcap. 8vo. 2s.

French Poetry for the Young. With Notes, and preceded by a few plain Rules of French Prosody. 5th edition, revised. Fcap. 8vo. 1s. 6d.

French Prose Composition, Materials for. With copious footnotes, and hints for idiomatic renderings. 23rd thousand. Fcap. 8vo. 3s. Key. 2nd edition. 6s. net.

Prosateurs Contemporains; or, Selections in Prose, chiefly from contemporary French literature. With notes. 11th edition. 12mo. 3s. 6d.

French and English Dictionary, with upwards of Fifteen Thousand new words, senses, &c., hitherto unpublished. 6th edition, with numerous additions and corrections. In one vol. 8vo. Cloth. 10s. 6d. In use at HARROW, RUGBY, SHREWSBURY, &c.

Pocket Dictionary of the French and English LANGUAGES; for the everyday purposes of Travellers and Students. Containing more than Five Thousand modern and current words, senses, and idiomatic phrases and renderings, not found in any other dictionary of the two languages. New edition. 53rd thousand. 16mo. Cloth. 2s. 6d.

GERMAN.

Works by Prof. C. A. Buchheim, Ph.D.

German Prose Composition. Consisting of Selections from Modern English Writers. With grammatical notes, idiomatic renderings, and general introduction. 15th edition, enlarged and revised. With a list of subjects for original composition. Fcap. 8vo. 4s. 6d.

A Key to the First and Second Parts. 3rd edition. 3s. net. To the 3rd and 4th parts. 4s. net.

First Book of German Prose. Being Parts I. and II. of the above. With Vocabulary by H. R. Fcap. 8vo. 1s. 6d.

MUSIC.

A Text-book of Music. By H. C. Banister, Professor of Harmony and Composition at the R.A. of Music, at the Guildhall School of Music, and at the Royal Normal Coll. and Acad. of Music for the Blind. 15th edition. Fcap. 8vo. 5s.

London: GEORGE BELL & SONS, York Street, Covent Garden.

Messrs. Macmillan & Co.'s Educational Books,

FOR THE EXAMINATIONS OF THE SOCIETY OF ARTS.

MACMILLAN'S ELEMENTARY COMMERCIAL CLASS-BOOKS.

EDITED BY JAMES GOW, LITT.D., HEADMASTER OF THE HIGH SCHOOL, NOTTINGHAM. Globe 8vo.

THE HISTORY OF COMMERCE IN EUROPE. By H. DE B. GIBBINS, M.A. 3s. 6d.
COMMERCIAL ARITHMETIC. By S. JACKSON, M.A. 3s. 6d. Answers, 1s.
COMMERCIAL GEOGRAPHY. By E. C. K. GONNER. 3s.
A MANUAL OF BOOK-KEEPING FOR THE USE OF STUDENTS. By J. THORNTON. 7s. 6d.
MARINE INSURANCE. New Edition. By WILLIAM GOW, M.A. 4s. 6d.
INTRODUCTION TO COMMERCIAL GERMAN. By F. C. SMITH, B.A. 3s. 6d.
COMMERCIAL SPANISH. By Prof. DELBOS, Instructor H.M.S. *Britannia*, Dartmouth. 3s. 6d.
COMMERCIAL LAW. By Professor J. E. C. MUNRO, LL.D. 3s. 6d.

(I.) ARITHMETIC.

ARITHMETIC FOR SCHOOLS. By Rev. J. B. LOCK, M.A. New and Revised Edition. 4s. 6d. Key, 10s. 6d.
ARITHMETIC FOR BEGINNERS. By Rev. J. B. LOCK, M.A. 2s. 6d. Key 8s. 6d.
A SHILLING BOOK OF ARITHMETIC FOR ELEMENTARY SCHOOLS. By Rev. J. B. LOCK, M.A. 1s. With Answers, 1s. 6d.
EASY ARITHMETICAL EXERCISES FOR BEGINNERS. By J. G. BRADSHAW, B.A. 2s. With Answers, 2s. 6d.
ARITHMETIC IN THEORY AND PRACTICE. By J. BROOK-SMITH, M.A., LL.B. 4s. 6d.
RULES AND EXAMPLES IN ARITHMETIC. By the Rev. T. DALTON, M.A. 2s. 6d.
EXERCISES IN ARITHMETIC FOR THE USE OF SCHOOLS. By S. PEDLEY. 5s. Also in Two Parts, 2s. 6d. each.
ARITHMETICAL EXERCISES AND EXAMINATION PAPERS. By H. S. HALL, M.A., and S. R. KNIGHT, B.A. 2s. 6d.
ARITHMETIC FOR SCHOOLS. By Rev. BARNARD SMITH, M.A. 4s. 6d. Key, 8s. 6d.
ARITHMETIC FOR SCHOOLS. By Rev. BARNARD SMITH. Revised by Prof. W. H. H. HUDSON. 4s. 6d.
SHILLING BOOK OF ARITHMETIC FOR NATIONAL AND ELEMENTARY SCHOOLS. By Rev. BARNARD SMITH, M.A. Cloth, 1s. Answers, 6d. With Answers, 1s. 6d. Key, 4s. 6d.

(II.) ENGLISH.

THE CIVIL SERVICE READER. By T. EVAN JACOB, B.A., late Scholar of St Catherine's College, Cambridge; Principal of the Civil Service College, London. 2s.
THE CIVIL SERVICE ESSAY WRITER. By T. EVAN JACOB, B.A. 1s.
COMPANION TO THE CIVIL SERVICE ESSAY WRITER. By T. EVAN JACOB, B.A. 1s. 6d.
PRINCIPLES OF ENGLISH COMPOSITION THROUGH ANALYSIS AND SYNTHESIS. By P. GOYEN, 2s. Key. 4s. net.
A METHOD OF ENGLISH FOR SECONDARY SCHOOLS. By JAMES GOW, M.A., Litt.D. 2s. Key, 5s. net.
ENGLISH GRAMMAR. By Rev. R. MORRIS, LL.D. 1s.
EXERCISES ON MORRIS'S PRIMER OF ENGLISH GRAMMAR. By JOHN WETHERELL, M.A. 1s.
ENGLISH GRAMMAR EXERCISES. By P MORRIS, LL.D., and H. C. BOWEN, M.A. 1s.
ELEMENTARY LESSONS IN HISTORICAL ENGLISH GRAMMAR. By Rev. R. MORRIS, LL.D. 2s. 6d.

(III.) BOOK-KEEPING.

FIRST LESSONS IN BOOK-KEEPING. By J. THORNTON. 2s. 6d. Key 10s. 6d.
EXERCISE BOOKS TO FIRST LESSONS IN BOOK-KEEPING. No. 1, for Lessons I.-IX., 9d.; No. 2, for Test Exercises, 9d.; No. 3, for Test Exercises, 1s. 6d.; No. 4, for Lessons XIII. and XIV., 1s. 6d. Case to contain all the above, 6d. Complete set with case, 5s. No. 5, Condensed Edition for Working out a Selection on all the Lessons, 2s.; No. 6, Journal, 6d.
PRIMER OF BOOK-KEEPING. By the Same. 1s. Key, 2s. 6d.
EXERCISE BOOKS TO PRIMER OF BOOK-KEEPING. Part I., Ledger; Part II., Journal. The Set, 1s.
EASY EXERCISES IN BOOK-KEEPING. By the Same. 1s.
A MANUAL OF BOOK-KEEPING FOR THE USE OF STUDENTS. By J. THORNTON. 7s. 6d.
EXAMINATION PAPERS IN BOOK-KEEPING. 9d. Key, 2s.

(IV.) GEOGRAPHY.

AN ELEMENTARY GEOGRAPHY OF THE BRITISH ISLES. By Sir ARCHIBALD GEIKIE, F.R.S., &c. 1s.
THE ELEMENTARY SCHOOL ATLAS. 24 Maps in Colours. By J. BARTHOLOMEW, F.R.G.S. 1s.
MAPS AND MAP-DRAWING. By W. A. ELDERTON. 1s.
AN ELEMENTARY CLASS-BOOK OF GENERAL GEOGRAPHY. By H. R. MILL, D.Sc. Illustrated. 3s. 6d.
GEOGRAPHY OF EUROPE. By J. SIME, M.A. Illustrated. 2s.
ELEMENTARY GEOGRAPHY OF THE BRITISH COLONIES. By GEORGE M. DAWSON, LL.D., F.R.S. and ALEXANDER SUTHERLAND, M.A. 2s.
GEOGRAPHY OF AFRICA. By E. HEAWOOD. Globe 8vo. 2s. 6d.

(X.) FRENCH.

MACMILLAN'S PROGRESSIVE FRENCH COURSE. By G. E. FASNACHT. First year, 1s. Supplementary Exercises to First Course, 1s. Second year, 2s. Third year, 2s. 6d. Keys, 4s. 6d. net each.
MACMILLAN'S FRENCH COMPOSITION. By G. E. FASNACHT. Part I., Elementary, 2s. 6d. Key, 4s. 6d. net. Part II., Advanced, 5s Key, 5s. net.
MACMILLAN'S PROGRESSIVE FRENCH READERS. By G. E. FASNACHT. First year, 2s. 6d. Second year, 2s. 6d.
SELECTIONS OF FRENCH IDIOMS. Compiled by Madame PH. PLAN. With a Preface by F. F. Roget. 3s. 6d.
THE STUDY OF FRENCH ACCORDING TO THE NEWEST AND BEST SYSTEMS. By ALFRED F. EUGÈNE, Professeur Officiel de l'enseignement secondaire (Université de France), and H. E DUBIAUX. Books I. to VIII., sewed, 6d. each. Complete Volume, 4s. 6d.

(XI.) GERMAN.

MACMILLAN'S PROGRESSIVE GERMAN COURSE. By G. E. FASNACHT. First year, 1s. 6d. Second year, 3s. 6d. Keys, 4s. 6d. net each.
MACMILLAN'S GERMAN COMPOSITION. By G. E. FASNACHT. I. First Course. Parallel German-English Extracts and Parallel English-German Syntax 2s. 6d.
MACMILLAN'S PROGRESSIVE GERMAN READERS. By G. E. FASNACHT. First year, 2s. 6d.
A GERMAN PRIMER. Containing a First Grammar, Reader, and Writer, for the Lower Forms of Public Schools. By OTTO SIEPMANN. 3s. 6d.

Messrs. Macmillan & Co.'s Educational Books (continued).

(XXI.) DOMESTIC ECONOMY.

A PRIMER OF DOMESTIC ECONOMY. By EDITH A. BARNETT and H. C. O'NEILL. 1s.
PRIMER OF HYGIENE. By ERNEST S. REYNOLDS, M.D. (Lond.) With 50 Illustrations. 1s.
A TEXT-BOOK OF NEEDLEWORK KNITTING, & CUTTING-OUT. By ELIZABETH ROSEVEAR. 6s.
NEEDLEWORK, KNITTING, & CUTTING-OUT FOR OLDER GIRLS. By ELIZABETH ROSEVEAR. Standard IV., 6d. Standard V., 8d. Standards VI. and VII., and Ex. VII., 1s.
DRESSMAKING: A TECHNICAL MANUAL FOR TEACHERS. By Mrs. HENRY GRENFELL. 1s.
THE PRINCIPLES OF DRESSMAKING. By Mrs. BROUGHTON, of the National Schools of Cookery and Domestic Economy. [*Shortly.*]
FIRST LESSONS IN THE PRINCIPLES OF COOKING. By LADY BARKER. 1s.
THE SCHOOL COOKERY BOOK. By A. C. E. GUTHRIE WRIGHT, Hon Sec. to the Edinburgh School of Cookery. 1s.
MIDDLE-CLASS COOKERY BOOK. Compiled for the Manchester School of Domestic Economy and Cookery. 1s. 6d.
FIRST LESSONS ON HEALTH. By J. BERNERS. 1s.
HOUSEHOLD MANAGEMENT AND COOKERY. By W. TEGETMEIER. 1s.

(VII.) ECONOMICS.

A BRIEF TEXT-BOOK OF POLITICAL ECONOMY. By F. A. WALKER, M.A. 6s. 6d.
FIRST LESSONS IN POLITICAL ECONOMY. By F. A. WALKER. 5s.
PRINCIPLES OF ECONOMICS. By PROF. ALFRED MARSHALL. Vol. I. Second Ed. 12s. 6d. net.
ELEMENTS OF ECONOMICS OF INDUSTRY. By PROF. ALFRED MARSHALL. Crown 8vo. 3s. 6d.
THE PRINCIPLES OF POLITICAL ECONOMY. Second Ed. By HENRY SIDGWICK. 16s.

(VIII.) PRECIS WRITING.

INDEXING AND PRECIS-WRITING FOR THE CIVIL SERVICE CANDIDATES. By T. EVA. JACOB, B.A. 2s. 6d.

MACMILLAN & CO., LTD., LONDON.

CLARENDON PRESS LIST.

BOOK-KEEPING. By Sir R. G. C. HAMILTON, K.C.B., and JOHN BALL. New and Enlarged Edition. 2s.
*** Ruled Exercise Books adapted to the above may be had, price 1s. 6d.; also, adapted to the Preliminary Course only, price 4d.

TREATISE ON HARMONY. By Sir F. A. GORE OUSELEY, Bart. Third Edition. 4to. 10s.

TREATISE ON COUNTERPOINT, CANON, AND FUGUE, based upon that of Cherubini. By the same. Second Edition. 4to. 10s.

TREATISE ON MUSICAL FORM AND GENERAL COMPOSITION. Second Edition. 4to. 10s.

MUSIC PRIMER. By J. TROUTBECK, D.D., and F. DALE, M.A. Second Edition. Crown 8vo. 1s. 6d.

A MANUAL OF CURRENT SHORTHAND, ORTHOGRAPHIC and PHONETIC. By HENRY SWEET, M.A. Crown 8vo. 4s. 6d.

GEOGRAPHY FOR SCHOOLS. By ALFRED HUGHES, M.A. Part I.—Practical Geography. With Diagrams. Crown 8vo. 6d.

BRACHET'S ETYMOLOGICAL DICTIONARY OF THE FRENCH LANGUAGE. Translated by G. W. KITCHIN, D.D. Third Edition. 7s. 6d.

BRACHET'S HISTORICAL GRAMMAR OF THE FRENCH LANGUAGE. Translated by G. W. KITCHIN, D.D. Seventh Edition. 3s. 6d.

A HISTORICAL GRAMMAR OF THE FRENCH LANGUAGE. From the French of AUGUSTE BRACHET. Re-written and Enlarged by PAGET TOYNBEE, M.A. Crown 8vo. 7s. 6d.

PRIMER OF FRENCH LITERATURE. By GEORGE SAINTSBURY, M.A. Fourth Edition. Crown 8vo. 2s.

SHORT HISTORY OF FRENCH LITERATURE. By GEORGE SAINTSBURY, M.A. Fourth Edition. Revised 10s. 6d.

CORNEILLE'S HORACE. Edited, with Introduction and Notes, by GEORGE SAINTSBURY, M.A. 2s. 6d.

CORNEILLE'S CINNA. With Notes, Glossary, &c. Edited by GUSTAV MASSON, B.A. 2s.; stiff covers, 1s. 6d.

MOLIERE.—Le MISANTHROPE. Edited by H. W. G. MARKHEIM, M.A. 3s. 6d.

ELEMENTARY GERMAN PROSE COMPETITION. With Notes, Vocabulary, &c. By EMMA S. BUCHHEIM. 2s.

MODERN GERMAN READER. A Graduated Collection of Extracts from Modern German Authors. Edited by C. A. BUCHHEIM, Phil.Doc.
Part I.—PROSE EXTRACTS. With English Notes, a Grammatical Appendix, and a complete Vocabulary. Seventh Edition. 2s. 6d.
Part II.—EXTRACTS IN PROSE AND POETRY. With English Notes and Index. Second Edition. 2s. 6d.

SHORT GERMAN PLAYS. For Reading and Acting. With Notes, and a Vocabulary. Edited by E. S. BUCHHEIM. 3s.

A PRIMER OF ITALIAN LITERATURE. By F. J. SNELL, M.A. 3s. 6d.

MIGUEL DE CERVANTES.—THE ADVENTURE OF THE WOODEN HORSE and SANCHO PANZA IN BARATARIA. Edited, with Introduction, Life and Notes, by CLOVIS BEVENOT, M.A. Stiff covers. 2s. 6d.

A GRAMMAR OF THE RUSSIAN LANGUAGE. By W. R. MORFILL, M.A. Crown 8vo. 6s.

A Catalogue of the Clarendon Press Publications will be sent Post-free on application.

London: HENRY FROWDE, Clarendon Press Warehouse, Amen Corner, E.C.

CAMBRIDGE UNIVERSITY PRESS.

THREE NEW WORKS ON EDUCATIONAL SCIENCE.

CHAPTERS ON THE AIMS AND PRACTICE OF TEACHING. Edited by FREDERIC SPENCER, M.A., Phil.Doc., Professor of the French Language and Literature in the University College of North Wales, formerly Chief Master on the Modern Side in the Leys School, Cambridge. Crown, 8vo. 6s.

"The essays are vigorous and suggestive, and display a command of the theory and practice of education which should secure the attention of all who are interested in educational progress and reform."—*Times.*

ARNOLD OF RUGBY: HIS SCHOOL LIFE, AND CONTRIBUTIONS TO EDUCATION. Edited by J. J. FINDLAY, M.A., late Scholar of Wadham College, Oxford; Principal of the College of Preceptors' Training College. With an Introduction by the Right Rev. the LORD BISHOP OF HEREFORD. Crown 8vo. 5s.

VITTORINO DA FELTRE and other Humanist Educators: Essays and Versions. An Introduction to the History of Classical Education. By W. H. WOODWARD, M.A., Christ Church, Oxford; Lecturer on Education in Victoria University. Crown 8vo. 6s.

"THE FIRST MODERN SCHOOLMASTER.—Mr. Woodward has drawn a most engaging portrait of this great teacher—his aims, his methods, his rare personal qualities, and his disinterested devotion to high educational ideals. . . . . We can very warmly commend the whole monograph as at once singularly attractive and full of instruction."—*Times.*

PITT PRESS SHAKESPEARE FOR SCHOOLS.

With Introduction, Notes, Glossary, and Index. By A. W. VERITY, M.A.

"Mr. Verity is an almost ideal editor of school texts."—*Guardian.*

"Probably the most complete school edition of the 'Tempest' that has ever been issued."—*Educational Review.*

"It would seem that the ideal school edition of Shakespeare has at last been developed."—*University Correspondent.*

The Tempest. 1s. 6d. **Julius Cæsar.** 1s. 6d.
Twelfth Night. 1s. 6d. **A Midsummer Night's Dream.** 1s. 6d.
King Lear. *(In the Press.)*

NEW ENGLISH GRAMMARS.

THE ELEMENTS OF ENGLISH GRAMMAR. By A. S. WEST, M.A., Trinity College, Cambridge. 2s. 6d.

"It is far and away the best of its class hitherto published for boys of thirteen to sixteen years of age, and, if we mistake not, will soon become a standard text in secondary schools, and mark a new epoch in the teaching of English grammar."—*Guardian.*

AN ENGLISH GRAMMAR FOR BEGINNERS. By A. S. WEST, M.A. 1s.

"We recall with considerable pleasure the perusal of 'The Elements of English Grammar,' by the same author. We are glad to see that our own appreciative comments on that work have been largely endorsed, and that a second edition has already been called for. The qualities that caused the larger book to be so well received are precisely of that nature which would ensure the success of the smaller. With this elementary text-book in use in the lower classes of their schools, teachers will ensure that their pupils will have nothing to unlearn when ready for the more advanced work."—*Teachers' Monthly (Birmingham).*

PITT PRESS SERIES.—NEW VOLUMES.

Subject for London University B.A. Exam., and for Cambridge Higher Local Exam., 1898.

BACON'S ESSAYS. Edited, with Introduction and Notes, by S. WEST, M.A. 3s. 6d.; half-parchment, 5s.

"We congratulate Mr. West on this admirable and in every sense satisfactory edition of one of the greatest of English classics."—*Speaker.*

By the same Editor.

POPE'S ESSAY ON CRITICISM. Edited by A. S. WEST, M.A. 2s.

"Mr. West's book is not only useful as a 'text with notes;' it is also scholarly and interesting. He has worked with the true literary instinct, and his treatment of the 'Essay on Criticism' is in this respect notably above the level of what we are accustomed to in school editions of isolated works."—*Educational Times.*

CAMBRIDGE NATURAL SCIENCE MANUALS.

BIOLOGICAL SERIES.

GENERAL EDITOR—A. E. SHIPLEY, M.A., Fellow and Tutor of Christ's College.

Elements of Botany. By F. DARWIN, M.A., F.R.S. With numerous Illustrations. Crown 8vo. Second Edition. 4s. 6d.

Practical Physiology of Plants. By F. DARWIN, M.A., F.R.S., and E. H. ACTON, M.A. With Illustrations. Second Edition. Crown 8vo. 4s. 6d.

A Manual and Dictionary of the Flowering Plants and Ferns. By J. C. WILLIS, M.A. In Two Volumes. Crown 8vo. 10s. 6d.

The Vertebrate Skeleton. By S. H. REYNOLDS, M.A. Crown 8vo. With Illustrations. 12s. 6d.

PHYSICAL SERIES.

GENERAL EDITOR—R. T. GLAZEBROOK, M.A., F.R.S., Fellow of Trinity College, Assistant Director of the Cavendish Laboratory.

Mechanics and Hydrostatics. By R. T. GLAZEBROOK, M.A. Crown 8vo. 8s. 6d.
Also in separate Volumes. Part I., Dynamics, 4s. Part II., Statics, 3s. Part III., Hydrostatics, 3s.

Heat and Light. By R. T. GLAZEBROOK, M.A. Crown 8vo. 5s.
And separately: Heat, 3s. Light, 3s.

A Laboratory Note Book of Elementary Practical Physics. By L. R. WILBERFORCE, M.A., and T. C. FITZPATRICK, M.A.
Part I. Mechanics and Hydrostatics.
Part II. Heat and Optics.
Part III. Electricity and Magnetism.
} 1s. each Part.

THE PITT PRESS MATHEMATICAL SERIES.

		s.	d.
Smith, C.	Arithmetic for Schools. With or without Answers	3	6
	Or in Two Parts:—		
	Part I. Chaps. I.—VIII. Elementary. With or without Answers	2	0
	Part II. Chaps. IX.—XX. With or without Answers	2	0
Ball	Elementary Algebra	4	6
Euclid.	Elements of Geometry. Edited by H. M. TAYLOR, M.A., Trinity College, Cambridge.		
	Books I., II.	1	6
	Books III., IV.	1	6
	Books V., VI.	1	6
	Books XI., XII.	1	6
	Books I.—IV.	3	0
	Books I.—VI.	4	0
	Books I.—VI., and XI., XII. In One Vol., complete.	5	0

"It cannot fail to take a very prominent place among the valuable text-books of Geometry which have been issued during the last ten years."—*Journal of Education.*

		s.	d.
Hobson and Jessop.	Elementary Plane Trigonometry	4	6
Loney	Elements of Statics and Dynamics	7	6
	Part I., Elements of Statics	4	6
	Part II., Elements of Dynamics.	3	6
"	Mechanics and Hydrostatics	4	6
"	A Treatise on Elementary Dynamics	7	6
"	Plane Trigonometry	7	6
	Part I., up to and including the Solution of Triangles	5	0
	Part II., Analytical Trigonometry	3	6

LONDON: C. J. CLAY & SONS,
CAMBRIDGE UNIVERSITY PRESS WAREHOUSE, AVE MARIA LANE.