Reports of the visitors of examinations deputed by the branch council for England, on the 15th of June, 1866.

REPORTS

OF

VISITATIONS OF EXAMINATIONS.

1866-67.

CONTENTS.

CONFIDENTIAL.]

No. 1.

REPORT ON THE EXAMINATIONS OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

Visitors:—DR. STORRAR and MR. CÆSAR H. HAWKINS.

PRELIMINARY EXAMINATION.

As we stated in our former Report, the College require every candidate to produce evidence of his having passed a Preliminary Examination on the subjects of General Education, but have not an Examination of their own in Arts.

EXAMINATIONS FOR THE LICENCE.

We attended the Examinations for the Licence of the College in July, 1866, where every facility for observation was courteously afforded to us.

The Primary and Pass Examinations were held in successive weeks, and were conducted in the same manner as at our former visit.

Two Examiners are appointed for each subject of examination, who hold office for two years, and of whom one retires each year, but is re-eligible after a year's interval, and is not unfrequently re-appointed. The written questions are set partly by each of the two Examiners on each subject.

PRIMARY PROFESSIONAL EXAMINATION.

On July 3rd, nineteen Candidates attended to answer, in writing, six questions on Anatomy and Physiology, for which three hours (from 7 to 10 P.M.) were allowed, one Examiner being present the whole time. The answers are looked over by both Examiners separately.

On the following day, July 4th, the same Candidates attended for three hours (from 1 to 4 P.M.) to answer, in writing, five questions on Chemistry, Materia Medica, and Practical Pharmacy.

In the evening of the same day twelve of these Candidates were examined *vivâ voce* on the same subjects, and the remaining seven on the following evening. The four Examiners sat at four different tables, and each Candidate was examined for a quarter of an hour at each table, being therefore altogether

one hour under examination. Specimens of drugs, articles of Materia Medica, and chemical preparations were amply provided at two tables; but the Examiners on Anatomy and Physiology had no means whatever of practical examination, except that on one table was a book of anatomical plates, on which some questions were sometimes put.

On July 6th the Examiners met to decide on the merits of the Candidates. No special report is given on the papers, but each Examiner forms his opinion of the combined value of the written and *vivâ voce* examination of each Candidate, and sometimes confers with his colleague before the report is made.

Thus there were four reports on each Candidate, marked Good (G.), Moderate (M.), or Bad (B.). Any Candidate with some *G.* reports will pass: Candidates reported *M.* by all the Examiners may also pass; for example, of two such Candidates one was allowed to pass after some discussion, and on the other a vote was taken, and he also passed by three affirmative votes to one dissentient. Even a report *Bad* does not necessarily exclude a Candidate, if after a discussion, and perhaps voting, it is decided by the other Examiners that he has shown sufficient merit. On this occasion six Candidates were rejected, and thirteen were successful in their examination.

It appeared to us that the questions to be answered in writing were on the whole fair and sufficient—those on Anatomy and Physiology not very searching or extensive—and our estimate of the answers of those papers which we examined corresponded with the final decision of the Examiners.

PASS EXAMINATION.

For the Pass Examination there were twelve Candidates, of whom three were already qualified for registration. One Candidate withdrew during the writing, and all the others were admitted to the Licence.

On July 10th they attended for three hours (from 7 to 10 P.M.) to answer, in writing, six questions on the Principles and Practice of Medicine in the presence of one of the Examiners.

On July 11th those Candidates, eight in number, who were not already qualified, were sent in the morning to two different hospitals, where one of the Examiners, attached to that hospital, questioned four Candidates assigned to him clinically on medical cases, one of us being present at each place.

In the evening of the same day all the Candidates attended for three hours (from 7 to 10 P.M.) to write their answers to four questions on the Principles and Practice of Surgery, and to the same number of questions on Midwifery and Diseases peculiar to Women. The questions appeared to us to be fair tests of knowledge on each subject.

On July 12th, in the afternoon, the eight unqualified Candidates were

sent to two hospitals, four to each, to which the Examiners in Surgery were attached, for Clinical Examination in Surgery, at each of which one of us again attended.

As we stated in our former Report, Candidates who are possessed of qualifications obtained before 1861 are exempted from every part of the Primary Examination, from all written examinations, and from both the Clinical Examinations.

The Clinical Examinations in Medicine appeared to us to be very usefully and practically conducted, and the Candidates seemed to diagnose disease, to examine chemically and microscopically, and to answer questions satisfactorily; the Clinical Examinations in Surgery are of necessity much more limited in extent and value, though not without advantage.

In the evening of this day all the eleven remaining Candidates were examined *vivâ voce* at six tables, by the six Examiners in Medicine, Surgery, and Midwifery; and as each Candidate is questioned for a quarter of an hour at each table, his examination occupies altogether an hour-and-a-half, equally divided between the three subjects. The two Examiners in Midwifery were provided with Pelves and Fœtal Heads, but no other preparations of any kind were placed on any of the other tables.

The same system is followed in deciding on the merits of the Candidates as in the Primary Examination, except that, as there are six Examiners on this occasion, there are six reports, the Examiners in Medicine and Surgery forming their reports from the combined value of the written, *vivâ voce*, and Clinical parts of the Examination, without defining the merits of each portion separately.

In all that we observed of the different parts of the Examination of individual Candidates we coincided with the decision of the Examiners, and we think the Examinations are fair tests of the Candidate's fitness for Medical Practice.

The questions used in both Examinations are annexed for the decision of the Branch Council as to the expediency of their being printed as part of this Report.

We did not feel called upon to visit the Examination for the Membership of the College, for the reasons stated in our last Report.

We venture to suggest that there is room for improvement in the Examinations on Anatomy and Physiology, which might be made more practical—if not by means of recent dissections, at least by dissected parts, preparations, and bones; and that Pathological preparations might be introduced with advantage at the Pass Examination, unless employed during the Clinical Examination at the hospital, which was done in part at our former visitation.

We are of opinion that it would give greater precision to the mode of deciding

on the merits of the Candidates if each Examiner were to report under separate heads on the written, *vivâ voce*, and Clinical parts of the Examination.

The examination of Candidates by a single Examiner, without any colleague or assessor, appears to us to be open to obvious objection; and we could not but observe how frequently it thus happened that the Examiners were called on to examine and report upon their own pupils, Candidates being sometimes examined by two or more of the teachers of their own school or hospital in the same evening.

(Signed) JOHN STORRAR.
CÆSAR H. HAWKINS.

CONFIDENTIAL.]

No. 2.

REPORT OF THE MEMBERS OF THE BRANCH COUNCIL APPOINTED TO VISIT THE EXAMINATIONS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Visitors :—Dr. SHARPEY, Mr. COOPER, and Dr. PARKES.

PRELIMINARY EXAMINATION IN GENERAL KNOWLEDGE.

THE College of Surgeons does not itself conduct the Entrance Examination in General Knowledge, but delegates this duty to Examiners appointed by the College of Preceptors.

As an example of this Examination, we hand in for inspection the Papers put at Christmas.

It will be seen that nine subjects are compulsory for Candidates for the Membership, viz. reading aloud from an English author, writing from dictation, English grammar, English composition, arithmetic, geography, English history, the first book of Euclid, and a translation from Cæsar's Commentaries. Another subject is chosen from a list, viz., translation from Greek, French, or German,—algebra, mechanics, chemistry, botany and zoology.

The books from which translations are to be made are selected from year to year.

We have not seen the answers, and therefore refrain from expressing an opinion, except that, as far as we can judge from the questions, the questions, if properly answered, must be a sufficient test.

PROFESSIONAL EXAMINATIONS.

PRIMARY EXAMINATION.

We attended the Primary Professional Examination in November, 1866, and again during the present year. We have already fully described the scope and method of the Examination, and will not recapitulate what we then stated.

The only alterations in the Examination were, that more physiological

questions were asked in the written Examination, that in the practical part there were a greater number and greater variety of preparations, and that microscopical specimens of nerve, muscle, bone, &c., were used.

We have already said that this Examination appears to us sufficient to test a Candidate's knowledge in Anatomy and Physiology.

We were permitted, as before, to read some written answers. We may remark that some of the answers marked "bad" by the Examiners, and which naturally led to the rejection of the Candidates, showed deplorable ignorance. It must be explained, however, that on the occasion in question a large number of the Candidates had been previously rejected, and some of them several times. In reference to this matter, we think it would be desirable to ascertain what proportion of Candidates rejected more than once, eventually pass the Examination, and after how many failures. In some cases it becomes a question whether it would not be better for themselves, as well as for the public, that young men who, through want of capacity or want of serious application, repeatedly fail to pass the Primary Examination, should not, after a certain number of trials, be warned to desist from pursuing a profession for which they are not fitted, before it is too late to choose another occupation.

We may also observe that, after reading the answers given in this and in the Pass Examination, we were struck with the importance of having, if possible, some common or recognized standard by which the answers could be estimated. There is, doubtless, a difficulty in this, and we are not about to suggest such a standard now, but we believe this point will have eventually to be considered by the General Medical Council and by the various Licensing Bodies.

We do not subjoin any questions, as they were of the same character as those given in last year's Report, with the exception of the alteration already referred to.

Pass Examination.

We attended this Examination several times in the autumn and winter of 1866-67.

On the first occasion the Examination was conducted in the same manner as described in our last Report; but in subsequent Examinations a very important addition was made. The Candidates underwent a practical examination in bandaging, in applying splints, apparatus for reducing dislocations, &c.

This is a very great improvement, and we think the College deserves much credit for the alteration. We trust we may receive it as a token that there will be further extensions in this very necessary part of an Examination. We would suggest that it should be specially reported on next year, when it will be, doubtless, even more complete than it is now, and when we hope it may be possible that operations on the dead body may be also required.

The questions of the written Examinations and those put at one of the oral Examinations, and taken down by Mr. Cooper, have been read over, and appear to us to be very good. We were also allowed to examine specimens of the written answers. As we noted last year, the questions are essentially practical, and deal with cases that are of constant occurrence in Surgery. It is a matter for consideration, however, whether one paper, containing six written questions, is sufficient for so important an examination as this is.

In concluding our Report, we must again repeat what was said last year, that we have not entered into the question whether the range of subjects is sufficient to qualify for a Diploma in Surgery. In this country most Surgeons necessarily engage in the treatment of medical cases, and it is a matter of notoriety that many gentlemen who have been examined only by the College of Surgeons, and therefore only in Anatomy, Physiology, and Surgery, are engaged in general practice throughout the country. The point we have referred to is therefore one of considerable importance.

(Signed) W. Sharpey.
Geo. Cooper.
E. A. Parkes.

POSTSCRIPT.

On the 23rd April, 1867, we attended the Practical Examination in Bandaging. Each Candidate has from ten to fifteen minutes to apply certain splints and bandages, or apparatus for dislocations or hernia, on living men. In an hour twenty-four Candidates can be examined by six Examiners. We are disposed to think most highly of this additional requirement; not only is a Candidate easily tested in his skill in bandaging and such operations, but an Examiner can readily see if he is acquainted with the various fractures and dislocations he is required to put up. We have no doubt that the College of Surgeons will not only test the Candidates much better, but will also materially advance the study of Clinical Surgery by this plan; and we hope we shall see it still more extended by requiring the Candidate to show on the dead body that he can pass the catheter, plug the nostrils, or perform similar small operations.

CONFIDENTIAL.]

No. 3.

VISITATION OF THE EXAMINATIONS AT APOTHECARIES' HALL, LONDON.

Visitors:—Dr. ALDERSON, Dr. PARKES, and Dr. QUAIN.

EXAMINATION IN ARTS.

THE subjects of Examination in Arts, and the periods at which this Examination is held, are fully set forth in the programme attached to this Report. Two of us visited the Examinations held on the 25th and 26th of January, 1867, and we have all had the opportunity of reading several of the Candidates' answers.

The Examiners on the occasion referred to were—

George Buchanan, M.D., B.A., London.
John Clewin Griffith, M.A., M.B., Cantab.
Uriah Perrin Brodribb, M.B., B.A., London.

These gentlemen are appointed Examiners for the special duty of the Examinations in Arts.

Forty-seven Candidates were under examination; of whom 29 passed, 17 were rejected, and one retired. Of these 47 Candidates, 17 had been previously rejected.

We append the questions. They are not very difficult, but they are well adapted to show that any young man who failed to answer them correctly was not sufficiently educated to commence the technical study of a learned profession.

The Examiners conducted the Examination with great care and discrimination, leaving in this respect nothing to be desired. The fact that 17 Candidates out of 47 were rejected, shows that the Examination is sufficiently strict to prevent incompetent persons from receiving a certificate. On the other hand, the same fact shows, were such evidence necessary, how many ignorant and ill-educated youths are prepared to enter the profession if a sufficient test of competence were not made a step preliminary to their doing so.

We have to acknowledge the ready courtesy with which all our enquiries were answered, and the freedom with which the written answers we required were placed at our disposal.

EXAMINATIONS IN ARTS.

Regulations.

This examination will be held at the Hall of the Society on Friday and Saturday, January 25th and 26th, April 26th and 27th, September 27th and 28th.

The examination will be conducted by means of printed papers; and for the purpose of further ascertaining the competence of the Candidates to pass, a *vivâ voce* examination will also be held.

Candidates will be examined in the following subjects; and no Candidate will be approved unless he show a competent knowledge of each branch of the Examination:—

I. English History and the English Language.
II. Mathematics and Natural Philosophy.
III. The Latin Language.

Candidates may also, at their own option, be examined in the following additional subjects; proficiency in the whole of the five branches entitling the Candidate to a Special Certificate.

IV. The Greek Language.
V. Logic.

[*See note on page* 15.]

The Examinations will take place in the following order:—

Friday Morning, 10 to 1.—English History and the English Language. Mathematics and Natural Philosophy.

Friday Afternoon, 2 to 4½.—The Latin Language.

Saturday Morning, 10 to 1.—Voluntary Examination. The Greek Language, and Logic.

Saturday Morning, 10 o'clock.—*Vivâ voce* Examination.

At the conclusion of the Examination, the Examiners will publish, in alphabetical order, a list of such Candidates as have passed, distinguishing those who are entitled to a certificate of special proficiency; and on the following Monday morning, at ten o'clock, certificates will be delivered to each of the successful Candidates.

Syllabus of Subjects for Examination, 1867.

[*See note on page* 15.]

English History. More particularly the period since the accession of James I.

The English Language. Its Structure and Grammar. Proficiency in Composition will be judged of by the style of the answers generally.

Mathematics. The Ordinary Rules of Arithmetic.

Vulgar and Decimal Fractions.

Addition, Subtraction, Multiplication, and Division of Algebraical Quantities.

Simple Equations.

The First Book of Euclid.

Natural Philosophy. Explain the Composition and Resolution of Statical Forces.

Describe the Mechanical Powers, and state the ratio of the Power to the Weight in each.

Define the Centre of Gravity.

Give the general Laws of Motion.

State the Law of the Motion of Falling Bodies.

Define Specific Gravity, and show how it may be ascertained.

Describe and explain the Barometer, the Siphon, the Common Pump and Forcing Pump, and the Air Pump.

The Latin Language.

January Examination. Virgil, Æneid, Books I. and II.

April Examination. Cicero, Or. in Catilinam I. and II.

September Examination. Horace, Odes, Books I. and II.

Easy Grammatical Questions will be introduced into the Latin Paper, and each Candidate will be expected to give satisfactory answers to these.

Voluntary Examination.

[*See note on p.* 15.]

The Greek Language.

Homer, Iliad, Book I.

Grammatical Questions.

Logic. Whateley's Elements of Logic, the Introduction, First Book, and Second Book to the end of Chapter III.

Certificates in Arts granted by any of the Bodies whose certificate is recognized by the Medical Council, will be accepted from Candidates who present themselves at the Professional Examination at the Hall, as equivalent to their having passed the above Examination.

September, 1866.

NOTE.

On October 1, 1868, the following regulations of the General Medical Council will come into operation, and the Preliminary Examination at the Hall will thenceforth be modified in accordance therewith.

"The following subjects shall constitute a minimum to be required of Candidates for Preliminary Examination, viz.:

"*Compulsory Subjects*—

1. English Language, including Grammar and Composition.
2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations.
3. Geometry: First Two Books of Euclid.
4. Latin, including Translation and Grammar. And,
5. One of the following

"*Optional Subjects*—

1. Greek. After the year 1869, Greek shall be one of the compulsory subjects.
2. French.
3. German.
4. Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics."

EXAMINATION PAPERS.

Friday Morning, January 25, 1867.

Mathematics and Natural Philosophy.

I. Bisect a given rectilineal angle, that is, divide it into two equal angles.

II. Prove that parallelograms upon the same base and between the same parallels are equal to one another.

III. Find the Greatest Common Measure of 429 and 715.

IV. Find the value of $\frac{111}{1000}$ of £9 7*s.* 6*d.*; $\frac{13}{12}$ of £21 1*s.* 3*d.*; $\frac{10\frac{1}{4}}{36\frac{1}{4}}$ of £1.

V. Find the value of $3{\cdot}1045 + {\cdot}3579 + {\cdot}0009 + 100{\cdot}69$

VI. Multiply ·3021 by 3021·

VII. $3(x-2)+4=4(3-x)$. Find x.

VIII. Define the centre of gravity.

IX. Define specific gravity, and show how it may be ascertained.

Friday Morning, January 25, 1867.

ENGLISH GRAMMAR AND HISTORY.

I. In the following passage, parse the verbs, showing the mood, tense, number, and person of each, and what its relations are in the sentence:—

> "*Ham.* Speak the speech, I pray you, as I pronounced it to you, trippingly on the tongue: but if you mouth it, as many of your players do, I had as lief the town-crier spoke my lines. Nor do not saw the air too much with your hand, thus, but use all gently; for in the very torrent, tempest, and, as I may say, the whirlwind of passion, you must acquire and beget a temperance that may give it smoothness."

II. Give the derivations of the following words, and show how they come to have their present meanings: 'verb,' 'conscience,' 'candidate,' 'supercilious,' 'imbecile.'

III. Write an account of the reign of Charles I., and discuss the effect of that reign on the future constitutional history of England.

IV. What were the circumstances that immediately led to the Revolution of 1688.

Friday, January 25, 1867. *Afternoon*, 2 *to* 4½.

LATIN.

I. Translate:—

Lucus in urbe fuit media, lætissimus umbræ,
Quo primum, jactati undis et turbine, Pœni
Effodere loco signum, quod regia Juno
Monstrârat, caput acris equi; sic nam fore bello
Egregiam, et facilem victu per sæcula gentem.
Hic templum Junoni ingens Sidonia Dido
Condebat, donis opulentum et numine divæ;
Ærea cui gradibus surgebant limina, nexæque
Ære trabes; foribus cardo stridebat ahenis.
Hoc primum in luco nova res oblata timorem
Leniit; hic primum Æneas sperare salutem
Ausus, et afflictis melius confidere rebus.
Namque, sub ingenti lustrat dum singula templo,
Reginam opperiens; dum, quæ fortuna sit urbi,
Artificumque manus inter se operumque laborem
Miratur; videt Iliacas ex ordine pugnas,

Bellaque jam fama totum vulgata per orbem,
Atridas, Priamumque, et sævum ambobus Achillem.
Constitit; et lacrimans, Quis jam locus, inquit, Achate,
Quæ regio in terris nostri non plena laboris?
En Priamus: sunt hic etiam sua præmia laudi:
Sunt lacrimæ rerum; et mentem mortalia tangunt.
Solve metus; feret hæc aliquam tibi fama salutem.
Sic ait, atque animum pictura pascit inani,
Multa gemens, largoque humectat flumine vultum.
Namque videbat, uti bellantes Pergama circum
Hac fugerent Graii, premeret Trojana juventus;
Hac Phryges, instaret curru cristatus Achilles.

II. Forsitan et, Priami fuerint quæ fata, requiras.
Urbis uti captæ casum, convulsaque vidit
Limina tectorum, et medium in penetralibus hostem;
Arma diu senior desueta trementibus ævo
Circumdat nequidquam humeris, et inutile ferrum
Cingitur, ac densos fertur moriturus in hostes.
Ædibus in mediis, nudoque sub ætheris axe,
Ingens ara fuit; juxtaque veterrima laurus
Incumbens aræ, atque umbra complexa Penates.
Hic Hecuba et natæ nequidquam altaria circum,
Præcipites atra ceu tempestate columbæ,
Condensæ, et divûm amplexæ simulacra sedebant.
Ipsum autem sumtis Priamum juvenilibus armis
Ut vidit: Quæ mens tam dira, miserrime conjux,
Impulit his cingi telis? aut quo ruis? inquit.
Non tali auxilio, nec defensoribus istis
Tempus eget; non, si ipse meus nunc afforet Hector.
Huc tandem concede; hæc ara tuebitur omnes:
Aut moriere simul. Sic ore effata, recepit
Ad sese, et sacra longævum in sede locavit.

III. (α) Give the Nominative singular, Declension, and Case, and the reason for their being in that case, of such of the following words as are nouns.

(β) Give the Mood, Conjugation, Person, and Tense, also the first person present, perfect, and infinitive, of such as are verbs. Give also the noun nominative, and words governed (if any) by such verbs: urbe — jactati — turbine — monstrârat — condebat — numine — surgebant — sperare — miratur — præmia — limina — tectorum — cingitur — axe — complexa — afforet — ore — sede.

Saturday Morning, January 26, 1867. 10 *to* 1.

VOLUNTARY EXAMINATION.—LOGIC.

I. What main mistake has been made respecting the province of Logic? Define the proper application of the science.

II. Give examples of (1) Categorical and Hypothetical propositions; and (2) of a Syllogism that is faulty through non-distribution of the middle term.

GREEK.

I. Translate:—

Τὸν δ' αὖτε προσέειπε θεὰ γλαυκῶπις Ἀθήνη·
ἦλθον ἐγὼ παύσουσα τεὸν μένος, αἴ κε πίθηαι
οὐρανόθεν· πρὸ δέ μ' ἧκε θεὰ λευκώλενος Ἥρη,
ἄμφω δμῶς θυμῷ φιλέουσά τε, κηδομένη τε.
ἀλλ' ἄγε, λῆγ' ἔριδος, μηδὲ ξίφος ἕλκεο χειρί.
ἀλλ' ἤτοι ἔπεσι μὲν ὀνείδισον, ὡς ἔσεται περ.
ὧδε γὰρ ἐξερέω, τὸ δὲ καὶ τετελεσμένον ἔσται·
καί ποτέ τοι τρὶς τόσσα παρέσσεται ἀγλαὰ δῶρα
ὕβριος εἵνεκα τῆσδε· σὺ δ' ἴσχεο, πείθεο δ' ἡμῖν.

II. Parse the first four nouns and the first four verbs in the foregoing extract.

PROFESSIONAL EXAMINATION.

We visited the Professional Examination in November, 1866, and again in April, 1867. In our last year's Report we fully explained the general system of the Examination, and the means taken to arrive at a proper conclusion. We need not go over this ground again, as we have nothing to add to our former statements.

We found, however, the details of the Examination had been considerably altered, more especially in reference to the suggestions we made in our Report last year. And here it is but simple justice to the Society of Apothecaries to say, that they have endeavoured to meet the wishes of the General Council, and have most judiciously introduced great improvements into their Examinations.

The changes affect *both* the First and the Second Examinations.

As regards the former, the written part of the Examination has been much extended. Whereas, formerly, there were only four questions in Anatomy and Physiology, and four in Chemistry, which were answered in one hour and a half, there are now six questions in Anatomy, four in Chemistry, and three in Materia

Medica, one of these being botanical, and the time is now extended to two hours and a half.

In the Second Examination, the written Examination formerly included four questions in Medicine, and four in Forensic Medicine, answered in one hour and a half.

Now the questions in Medicine are raised to six, one of these being in Therapeutics and one in Pathology,—both of these must be answered. Three questions are put in Midwifery, on which subject there was formerly no written examination. In Forensic Medicine there are still four questions, one of them on Toxicological Chemistry. The time allowed for answering is extended to two hours and a half.

In both Examinations, therefore, the number of written questions has been raised from eight to thirteen; other subjects have been introduced, and more time has been given for answering.

The oral part of the Second Examination has been also altered, more use being made of morbid and microscopic specimens; and medico-chemical tests, which the Candidate performs before the Examiners.

Both Examinations, in fact, have been very much improved; and we believe that, as regards the subjects of Examination, the kind of questions put in the written and oral Examinations, and the time given for answering, the Examination is as good as the Medical Council could desire.

There is one point in which the Examiners have been unable to carry out an implied wish of the Council. They do not require Candidates to examine patients in their presence. As they are obliged by their Act to hold their Examinations weekly, and as there are always Candidates to be examined, they think that they would have great difficulty in providing proper cases at such short intervals. Moreover, they appear to think that proper cases could hardly be brought to Apothecaries' Hall; and it would be very difficult, if not impossible, to arrange weekly visits to an hospital.

We have not the slightest wish to urge on this matter prematurely. We prefer that the Society should have time to consider it in all its bearings, and should not be hurried into a decision either for or against this plan.

But we may observe, that there is no test for real honest clinical work—the most important work of all—like the test of actual examination of patients; and that there is no incentive to attend clinical work equal to the knowledge that such a test will be required. Moreover, as a test, the amount of practical examination need not be great, or be conducted on the most severe cases. Even in a slight case of disease, the mode in which the Candidate questions the patient, examines the organs, collects negative as well as positive evidence, and discusses the probabilities of diagnosis and proper treatment, will often show what amount of practical knowledge he possesses, as well as the examination of severe or of a great variety of cases. We suspect the difficulties in arranging for such an examination may not be so great as they appear, but we

think the Council may safely leave the matter to the further consideration of the Society.

Apart from this question of an examination of patients, we have no hesitation in stating that the Examination of the Society of Apothecaries is a most excellent one, and quite as extended and as prolonged as can be attempted in the present state of medical education.

There is one point to which we think the attention of the General Medical Council might be advantageously directed. We allude to the mode of estimating the value of written or oral answers; and to the comparative standard of different licensing bodies. It is a matter the importance of which will become more and more obvious, now that licences from any one body are current over the whole kingdom.

In our last year's Report we noticed that the Society of Apothecaries admitted Members of the College of Surgeons to a slighter examination than other Candidates. This has now been altered, and Members of the Royal College of Surgeons are subjected to a more strict examination than formerly.

In connection with this subject, we desire to draw the attention of the Council to this fact. Every year Members of the College of Surgeons, who have been practising generally on that single qualification, present themselves for examination at Apothecaries' Hall. Many of these gentlemen have been thus practising for years, and are completely established in their localities. A rejection at Apothecaries' Hall would greatly injure them; and yet in some, and indeed in not a few cases, their knowledge of medicine is very imperfect. The remedy for this can only be found in a regulation that a complete examination in all the subjects which a general practitioner ought to know should be enforced on every one, and that licences should not be given for portions or fragments only of the professional knowledge a general practitioner should possess. The means of doing this are obvious; and the matter is of such importance, that if it is not accomplished by the spontaneous action of those licensing bodies which give at present only a partial examination, we believe the Medical Council should take measures to provide that every one on the Register should have been examined in all the subjects which are essential for complete professional training.

(Signed) JAMES ALDERSON.
E. A. PARKES.
RICHARD QUAIN.

CONFIDENTIAL.]

No. 4.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE UNIVERSITY OF OXFORD.

Visitors:—Dr. PAGET and Dr. QUAIN.

THE first and second Examinations at Oxford for the degree of Bachelor of Medicine in 1866 commenced on Monday, Dec. 10, and ended on Friday, Dec. 14. We were present at them, one or both of us, on the last three days.

The Examinations were conducted in the same manner as those of 1865, of which a full report made by us was published in the Minutes of the General Medical Council for May 26, 1866 (vol. iv. p. 194). We think it unnecessary to repeat the description there given. The Examiners were the same, except that Prof. R. B. Clifton took the place of Prof. Henry Smith.

For the first Examination there were four Candidates, of whom two passed and two failed. For the second Examination there were two Candidates, both of whom were fully approved.

The Examinations were thorough and conducted with care, and were beyond all doubt "such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession."

We subjoin notices of the few particulars in which the Examinations differed from those of last year, or in which a more detailed report seemed desirable.

THE FIRST EXAMINATION.

This year the Examination in Botany was more extended; so that the deficiency which we indicated in our Report of 1865 was this year supplied.

We subjoin the paper on Physics in order to show what was required by the University in that subject, and as a good specimen of examination in those parts of Physical Science on which Medicine depends. The paper is, perhaps, somewhat more difficult than that of 1865.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 1866.

No. I.—Physics.

1. Define a *lever*, and state its mechanical advantage. Into what classes have straight levers been divided? Describe the mechanism by which the human arm is bent and extended.

2. Describe the variations which the effective force of gravity undergoes in sustaining the motion of a simple pendulum.

How is the pendulum employed in determining the accelerating effect of the force of gravity?

3. Describe the common Hydrometer, and the method of using it.

4. When a fine tube open at both ends is dipped in a liquid, describe the principal phenomena observed, and state the laws which they are found to obey.

To what forces are these phenomena to be ascribed?

5. Describe the construction and action of a *free reed* organ pipe.

Explain, upon the principle of the free reed, the action of the human organs of speech.

6. Describe the structure of the eye, considered as an optical instrument, and trace the course of the pencils of light which produce the image on the retina, illustrating by a figure.

What is the nature of defect known as *regular astigmatism*, what is its cause, how is it detected, and how remedied?

7. When plane polarized light, after passing through a tube filled with an aqueous solution of sugar, is plane analyzed, what phenomena are observed?

Describe Biot's Saccharometer, and the method of using it for determining the amount of sugar present in diabetic urine.

8. Describe experiments showing the conversion of work into heat (1) directly, (2) indirectly through electricity.

How much work must be done upon half a kilogram of copper (specific heat 0·095) in order to raise its temperature from 10° C. to 20° C.?

9. Describe any experiment which shows that when a liquid changes into a vapour heat disappears.

How is the latent heat of a vapour estimated? How has it been proposed

to employ the absorption of heat attending the change from the liquid to the gaseous state, as a means of destroying sensation in any part of the body, on which an operation is to be performed?

10. When a closed vessel containing a gas is heated at the bottom, explain how the gas becomes heated throughout.

In ventilating a room, at what places should the cold air be admitted? Give your reasons for your answer.

11. When a plate of copper and a plate of amalgamated zinc are placed in a vessel containing dilute sulphuric acid, state what takes place (1) when the plates are not connected, (2) when they are connected by a wire.

12. Describe Œrsted's experiment as to the action of an electric current on a moveable magnetic needle.

Explain the construction of Nobili's Astatic Multiplier.

In physiological research should the Multiplier be constructed with a long or a short coil? Give your reasons for your answer.

THE SECOND EXAMINATION.

In the course of the Clinical Examination at the Radcliffe Infirmary, the Candidates used the laryngoscope and microscope and clinical tests in forming their diagnosis; and they wrote full reports of the cases of the patients examined. They also performed a post-mortem examination.

There was no special paper in Materia Medica and Pharmacology, but a great number of excellent practical questions on these subjects were put in the course of the *vivâ voce* Examination; and the knowledge of the Candidates was very thoroughly tested by means of specimens of drugs and the criticism of prescriptions.

In all points not here referred to, the expressions of approval in our Report for 1865 are applicable to the Examinations in 1866.

We may add that we were received with the same courtesy, and had the same facilities given to us for judging of the Examinations.

The Examination Papers and *vivâ voce* questions were equally good with those of last year, and had a like general character. A set of the papers has been deposited in the office of the General Medical Council. A programme of the Examinations is subjoined.

EXAMINATION IN SUBJECTS OF GENERAL EDUCATION.

Every Candidate for the degree of M.B. must have passed all the Examinations required for the degree of Bachelor of Arts, prior to the enjoined period of four years occupied in medical study.

The following is a programme of the

EXAMINATIONS FOR THE B.A. DEGREE.

Candidates for this degree must have passed three Examinations at least, viz.:—

I. Responsions, usually passed in the First Term of Residence. This Examination consists of

(1.) A paper in Latin and Greek Grammar.
(2.) A passage for translation from English into Latin Prose.
(3.) Arithmetic.
(4.) Euclid i. and ii., or Algebra up to end of Simple Equations.

Books.—One Latin and one Greek author, *e.g.*:—
Greek.—Homer, any Five consecutive Books, or
Each of the Dramatists, any Two Plays, or
A similar amount in other authors.
Latin.—Virgil, any Five consecutive Books of the Æneid, or
Livy, any Three consecutive Books, or
A similar amount in any other author.

Each Candidate has to construe and answer questions from the Books which he brings in.

II. First Public Examination, or Moderations, must be passed between the Seventh and the Tenth Terms. Papers as follows:—

(1.) Latin and Greek Grammar.
(2.) A passage for Translation from English to Latin Prose.
(3.) Logic, or Euclid B. i. ii. iii., and Algebra, including Quadratics.

Books.—The Four Gospels in Greek (or a Greek book of Extra Ecclesiam Anglicanam), one Latin, and one Greek author, of which one must be a poet and the other an orator, and neither of which may be the same with either of the two brought in for Responsions, unless as many as Four Books are taken in.

Vivâ voce in all the books.

The books must be selected from an authorized list issued every year in Easter Term.

[For Michaelmas Term, 1867, and Easter Term, 1868, the list is as follows:—

1. Demosthenes de Corona.
2. Sophocles, Œd. Rex, Ajax, and Philoctetes.
3. Demosthenes, Olynth. and Phil.
4. Homer, Odys. vi.-xi.

1. Juvenal (omitting S. 2, 6, 9.)
2. Virgil, Æneid i.-vi.
3. Cicero in Cat. and Div. in Cæc., and in Verr., Act i.
4. Hor. Od. B. i.-iii., and Satires.

If a Candidate wishes to offer himself for Honours only in one of the four final Schools, he must have passed in Three Books at least before the Moderators. The Third Book for Michaelmas Term, 1867, or Easter Term, 1868, must be selected from the above list, or from the following:—

Herodotus, vi. vii.	Livy, xxi.-xxiii.
Plato, Rep. i. ii. iii.	Cicero de Nat. Deorum.
Thucydides, i. ii.	Tacitus, Hist. i. ii. iii.]

III. Second Public Examination, subjects of the pass Examination are—

(i.) Divinity, viz.: The Four Gospels and the Acts of the Apostles in Greek; the history contained in the Books of the Old and New Testaments, and the subjects of the Books; the Thirty-Nine Articles, and the Evidences of Religion.

(ii.) Books. One must be an historian and the other a philosopher (neither of these must have been brought in for Responsions), selected from an authorized list, *e. g.*:—

Plato, Rep. i.-iv., and Tacitus, Hist. i.-iv.

Passages are set for translation, and questions on the matter of the Books are given.

He must pass the *Mathematical* final School (Euclid B. i.-vi., or Algebra, part first), or

The *Natural Science School* (Mechanical Philosophy, Chemistry, Physiology. Two of these three subjects must be known, with some part of Mechanical Philosophy as a special subject) or

The *Law and Modern History School* (*English History* from the Conquest to Henry VIII., from Henry VIII. to Anne; and *Law*, Blackstone, vol. ii., or Blackstone on Real Property).

Instead of passing in two final Schools, of which Classics must be one, a Candidate may on obtaining a First, Second, or Third Class in any of the four final schools obtain his B.A. Degree, provided he has passed in Three Books at least before the Moderators, and has also passed in Divinity (or, if "Extra Ecclesiam Anglicanam," in the substitute for Divinity) before the Public Examiners in the Classical School.

(Signed) G. E. Paget,
Richard Quain.

December, 1866.

P.S.—Sets of the Examination Papers for the degree of B.A. in the year 1866 were produced by us at the Meeting of the Branch Council of England on April 12th, 1867, but, as they are very extensive, it was thought unadvisable to print them in our Report. They are deposited in the office of the General Medical Council. These Examination Papers are published year by year at Oxford, and may be purchased for a trifling sum of the booksellers.

G. E. P.
R. Q.

APPENDIX TO REPORT OF VISITATION OF EXAMINATIONS AT THE UNIVERSITY OF OXFORD.

Oxford Museum, Michaelmas Term, 1866.

PROGRAMME OF EXAMINATIONS FOR THE DEGREE OF M.B.

FIRST EXAMINATION.

Monday, Dec. 10. In the Anatomical Department of the Museum.
10 a.m. to 1 p.m. Practical Anatomy.
2 to 5 p.m. Paper on Anatomy and Physiology.

Tuesday, Dec. 11. Chemical Department.
10 a.m. to 1 p.m. Practical Chemistry.

Medical Department.
2 to 5 p.m. Paper on Chemistry.

Wednesday, Dec. 12. Medical Department.
10 a.m. to 1 p.m. Paper on Physics.

Thursday, Dec. 13. Medical Department.
Noon. Examination *vivâ voce*.

SECOND EXAMINATION.

Tuesday, Dec. 11. Medical Department.
2 to 5 p.m. Pathology.

Wednesday, Dec. 12. Medical Department.
10 a.m. to 1 p.m. Therapeutics.
2 to 5 p.m. Forensic Medicine and Hygiene.

Thursday, Dec. 13. Radcliffe Infirmary.
9·30 to 11·30 a.m. Clinical Examination.
2 to 5 p.m. Diseases of Women and Children, and Principles of Surgery.

Friday, Dec. 14. Medical Department of Museum.
10 a.m. Classical Paper. Examination *vivâ voce*.

CONFIDENTIAL.]

No. 5.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE UNIVERSITY OF CAMBRIDGE.

Visitors :—Dr. ACLAND and Dr. DENNIS EMBLETON.

IN conformity with the request of the English Branch Council, dated June 15th, 1866, the undersigned have attended the Examination of the University of Cambridge as follows :—

Dr. Acland was present at Cambridge on Tuesday and Wednesday, November 28th and 29th. Dr. Embleton on Monday and Tuesday, December 3rd and 4th.

They observed on those days such Examinations as took place respectively during their visit, and made inquiries on such other parts of the Examination as were carried on at other times, as seemed to them necessary for carrying out the spirit of the Resolutions, which proposed :—1st. "That the Visitations of the Examinations, Preliminary as well as Professional, of the Qualifying Bodies, by the Branch Councils, or such of their Members as they may depute, be continued during the ensuing year." And 2ndly. "That the Reports of the Visitors shall apply to every part of the Examinations of each Body, and shall include a statement of the facts observed and of the opinions of the Visitors as to the efficiency of the Examinations; as also such remarks and suggestions on defects in them as circumstances may indicate."

In the first place they would premise, that having only last year reported on the general nature of the Medical Examinations, and that having said that they confidently certify "that the Course of Study and the Examinations at Cambridge entirely satisfy the requirements of the Medical Act and the objects of the Visitation," they need, on this occasion, say no more on that head than that they emphatically repeat this their conviction. Although, as will be seen in the sequel, they purposely abstain on the present occasion from any discussion on General Education, nevertheless, considering the fact that some changes are in course of adoption with a view to ensuring a more complete method of study, it seems desirable to recapitulate the arrangements with respect to the Preliminary or Non-Professional Education.

1st. As to the Preliminary or Arts Studies. No one is admitted to any

Professional Examination till he has either graduated in Arts or passed the "Previous Examination."

The Subjects of the Previous Examination are briefly these:—

One of the Four Gospels in Greek.
Paley's 'Evidences of Christianity.'
The Accidence of the Latin and of the Greek Grammars.
One of the Latin and one of the Greek Classics.
The Elements of Euclid, Books i., ii., iii., and vi. Prop. 1, 2, 3, 4, 5, 6.
Arithmetic.
Algebra, special Examination in.

The Examination Papers of the Arts Previous Examination are hereto appended (A).

According to the Regulations of the University, a Student may, after passing the Previous Examination, and an additional Mathematical Examination, pass through a "Natural Science Tripos." If he distinguish himself therein, he may obtain a Certificate of Proficiency, which will exempt him from Examination in the subjects of such honours at the first Medical Examination, the subjects being Botany, Chemistry, and Physics.

The University has this year divided the Examination into three instead of, as heretofore, into two parts.

The subjects of the First Examination are,—
1. Mechanics and Hydrostatics.
2. Chemistry, with Heat and Electricity.
3. Botany.

The subjects of the Second Examination are,—
Elements of Comparative Anatomy.
Human Anatomy and Physiology.
Pharmacology.

The subjects of the Third Examination are,—
Pathology and the Practice of Physic. (Two Papers.)
Clinical Medicine.
Medical Jurisprudence.

THE FIRST EXAMINATION.

In the document marked B is given the extent to which the subjects are required, and examples of the papers are given.

The Chemistry is treated practically on paper and *vivâ voce*.

The Botany, by written descriptions of plants and by Papers.

The Physics by Paper and *vivâ voce*.

THE SECOND EXAMINATION.

Under the new regulation, no Candidate shall be admitted to this until after he has passed the first Examination, and has completed two years of medical study.

Exemption.—In the case of every person who has obtained Honours in the Natural Sciences Tripos, and has passed with credit the Examination in Comparative Anatomy, the Examiners for that Tripos shall, if required, give to such person a Certificate to that effect; and Candidates possessing such Certificates shall not be required to be examined again in that subject.

The Examination is conducted by printed papers of questions and *vivâ voce.*

A copy of the papers of questions is appended and marked C.

The *vivâ voce* Examination was conducted with dried and wet preparations, and with admirable microscopic specimens in Human and Comparative Anatomy; and with dried specimens and preparations in Pharmacology.

The Examination is open to Students of the University.

We received every courtesy, and had the opportunity of examining the answers to every question.

There was not this year any final Examination under the new regulation.

The Second Examination under the old regulation contains,—

Physiology, hereafter to be included in the second; and
Medical Treatment of Surgical and Obstetrical Diseases.
Pathology and Practice of Physic.
Medical Jurisprudence.

In each of these the Examination is on paper and *vivâ voce.*

A set of the Questions is printed in Appendix D.

The Examination in Clinical Medicine was most efficiently conducted—several cases were examined, some being out-patients, some in-patients, in the presence of other students. The diagnosis was made, and the treatment was fully discussed, and the precise significance of symptoms or of nomenclature was insisted upon in an admirable manner.

Besides this *vivâ voce* test, one or more cases were more fully described on paper in the Ward.

EXAMINATION FOR THE DEGREE OF M.C.

Henceforward no one will pass this Examination who has not passed the Examination for the M.B. Degree.

The following are the subjects:—

Surgical Anatomy.
Pathology and the Principles and Practice of Surgery.
Clinical Surgery.
Midwifery.

The Examinations are by writing, by *viva voce*, and by the examination of preparations.

A set of the Questions is printed in Appendix E.

The Clinical Examination is conducted in precisely the same public and complete manner as that on Medicine.

The Examiners were :—

1st M.B. Examinations (*New Regulations*).

Professor Liveing and Professor Babington, appointed.

2nd M.B. Examinations, not final (*New Regulations*).

Dr. Bond, *ex officio*, Dr. Dickinson and Dr. Drozier, appointed.

2nd M.B. Examinations, final (*Old Regulations*).

Dr. Bond, Dr. Fisher, Dr. Humphry, *ex officio*, and Dr. Hare, appointed.

M.C. Examinations.

Dr. Humphry, *ex officio*, Mr. Lestourgeon and Mr. Holmes, appointed.

The Examiners will in future be elected by the Senate, with the exception of the Regius Professor of Medicine in the Medical, and of the Professor of Anatomy in the Surgical Examinations. These two will be permanent Official Examiners.

There were nine names sent in of Candidates for the 1st M.B. Examination ; one of these subsequently withdrew his name, a second did not present himself at the Examination.

Seven were examined, and of these five passed.

There were for the 2nd M.B. (New Regulation) two Candidates, who passed.

For the 2nd M.B. (Old Regulations), two Candidates, who passed.

There was for the M.C. one Candidate, who passed.

It will be inferred from the above Report that, though neither of us was present during the whole Examination, we have every reason for believing that the Examinations are carried on in a way which should be entirely satisfactory to the Council.

(Signed) Henry Acland.
Dennis Embleton.

EXAMINATIONS FOR MEDICAL AND SURGICAL DEGREES AT THE UNIVERSITY OF CAMBRIDGE.

Michaelmas Term, 1866.

SECOND EXAMINATION FOR M.B. DEGREE.

(OLD REGULATIONS.)

Monday, Nov. 26.	Physiology	10 to 12.
	Medical Treatment of Surgical and Obstetrical Diseases.....	2 to 4.

Tuesday, Nov. 27.	Pathology and Practice of Physic	9 to 12.
	Medical Jurisprudence	2 to 4.
Wednesday, Nov. 28.	Clinical Medicine	11·30.

FIRST EXAMINATION FOR M.B. DEGREE.

(NEW REGULATIONS.)

Monday, Nov. 26.	Heat and Electricity	9 to 11.
	Practical Chemistry	12 to 2.
Tuesday, Nov. 27.	Chemistry	9 to 11.
	Botany	2 to 4.

SECOND EXAMINATION FOR M.B. DEGREE.

(NEW REGULATIONS.)

Monday, Dec. 3.	Elements of Comparative Anatomy	9 to 11·30.
	Pharmacology	2 to 4.
Tuesday, Dec. 4.	Human Anatomy and Physiology	9 to 12.

EXAMINATION FOR THE DEGREE OF M.C.

Monday, Nov. 26.	Surgical Anatomy	9 to 12.
	Midwifery	2 to 4.
Tuesday, Nov. 27.	Pathology, Principles and Practice of Surgery	1 to 4.
Wednesday, Nov. 28.	Clinical Surgery	11·30.

The Examinations will be held in the Anatomical Museum, and will be partly *vivâ voce*.

March 23, 1866.

THE BOARD OF MEDICAL STUDIES, in conformity with GRACE, March 22, 1866, issue the following Schedules, defining the range of the Examinations in Mechanics and Hydrostatics, Heat and Electricity, Chemistry, Botany, and Comparative Anatomy, for the guidance of Students proceeding to Medical Degrees.

MECHANICS AND HYDROSTATICS.

The elementary parts of Statics treated by simple geometrical methods, viz., the composition and resolution of forces acting in one plane at a point, the mechanical powers and the properties of the centre of gravity.

The elementary parts of Hydrostatics, viz., pressure of fluids elastic and non-elastic, equilibrium of floating bodies, specific gravity, and the simple instruments and machines.

HEAT AND ELECTRICITY.

HEAT. The questions may embrace

The different sources of heat. The general effects of heat in producing expansion, liquefaction, and vaporization.

Definition of temperature, measure of temperature.

Construction of a common thermometer, and comparison of thermometric scales. Coefficient of expansion. Expansion of water. Tension of aqueous vapour at different temperatures. Difference between saturated and unsaturated vapour.

Dalton's laws. Disappearance of heat during liquefaction, evaporation, and expansion of gases.

Measure of quantity of heat.

Communication of heat by conduction, convection, and radiation. Relative conducting powers of common substances. Comparative absorption of radiant heat from different sources in passing through air, glass, and rock salt. Reflection or absorption of heat at the surface of bodies. Newton's law of cooling as an approximation.

ELECTRICITY. The questions may embrace

Development of electricity by friction. Conductors and insulators. Relation of positive and negative electric states. Attraction and repulsion of electrified bodies. Electroscope. Quadrant electrometer. Communication of electricity by contact. Induction. Electric machine. Condenser and Leyden jar. Discharge.

Relation of static and dynamic electricity. Galvanic batteries. Heating effects of currents. Decomposition of water and simple salts. Magnetic galvanometer. Induced currents. Magneto-electric machine.

Simple calculations or questions depending directly upon the facts or laws above specified under either head.

CHEMISTRY.

The questions may embrace

The definition of an element. The conditions of occurrence in nature, the preparation and the leading characters of the following elements :—Oxygen, Hydrogen, Nitrogen, Sulphur, Phosphorus, Chlorine, Bromine, Iodine, Carbon, Potassium, Sodium, Iron, Zinc, Copper, Tin, Lead, Mercury, Silver, Gold, Platinum, Antimony, Arsenic, and Bismuth.

The composition, preparation, and chief characters of the following compounds :—Water, Nitrous, Nitric, and Pernitric Oxides, Ammonia, Carbonic

Oxide, Cyanogen, Potash, Soda, Lime, Baryta, Magnesia, Alumina, Oxides of Arsenic, Antimony, Bismuth, Iron, Manganese, Zinc, Tin, Copper, Silver, Lead, and Mercury. Also of the following acids: Nitric, Chloric, Sulphurous, Sulphuric, common Phosphoric, Carbonic, Oxalic, Silicic, Hydrochloric, Hydriodic, Hydrocyanic, Hydrosulphuric, and the salts of these acids with any of the metals of which the Oxides are above enumerated.

Olefiant gas and Marsh gas, Phosphoretted Hydrogen, Arsenetted Hydrogen.

Urea, Uric acid.

Saccharine and amylaceou compounds. Lactic acid.

Alcohol and its homologues. Ethers. Chloroform.

Acetic acid and its homologues. Fats. Glycerine. Soap.

Tartaric acid and tartrates.

Quina. Morphia. Strychnia.

Albumen, fibrine, caseine, gelatine.

The difference between a chemical and a mechanical compound. Diffusion of gases.

The constitution of the atmosphere, and reasons for regarding it as a mixture. Theory of combustion.

Laws of combination by volume, and by weight.

The expression of the reactions in any of the foregoing cases in the form of equations.

Definition of chemical equivalents, and compound radicles. Law of substitution. Determination of the quantitative composition of Water, Air, Carbonic Anhydride, Chloride of Silver, and black Oxide of Copper.

Calculation of the relative quantities of the several elements or compounds in any of the foregoing reactions, the atomic numbers being given.

Elements of analysis. Detection of any of the above-named metals and acids.

BOTANY.

The Examination will comprise descriptions of specimens of living plants and questions in Vegetable Anatomy and Physiology. A knowledge of the general structure, peculiarities, and affinities of the following orders only will be required :—

Ranunculaceæ	Umbelliferæ	Orchidaceæ
Cruciferæ	Compositæ	Amaryllidaceæ
Caryophyllaceæ	Boraginaceæ	Iridaceæ
Leguminosæ	Scrophulariaceæ	Araceæ
Rosaceæ	Labiatæ	Gramineæ
Onagraceæ	Primulaceæ	Filices
Cucurbitaceæ	Euphorbiaceæ	

COMPARATIVE ANATOMY.

1. The general plan of structure that distinguishes each of Cuvier's four great primary divisions of the animal kingdom.

2. The dermal, osseous, digestive, circulatory, respiratory, secretory, nervous and reproductive systems in the several *classes* of animals, and also the more important modifications of the organs of these systems in the different *orders*.

3. To identify and describe specimens or drawings of parts of animals.

CONFIDENTIAL.]

No. 6.

UNIVERSITY OF DURHAM.

Visitors:—Dr. SHARPEY and Dr. STORRAR.

THE University Examinations in Medicine and Surgery are conducted in the College of Medicine at Newcastle on Tyne, and at the Newcastle Infirmary.

When an Examination is to be held, Examiners are appointed by the University *pro hac vice*. The selection is not necessarily limited to the staff of the Newcastle College of Medicine, for on former occasions strangers have been appointed, but in the present instance all the Examiners were connected with the Newcastle College.

The Examinations which came under our notice, were the First and Final Examinations for the Licence in Medicine, and the Degree of Master in Surgery. The arrangement of the Examinations was as follows, the percentage of Marks which each Candidate was required to obtain in the written portion of the Examinations being indicated.

FIRST EXAMINATION FOR THE LICENCE IN MEDICINE, AND THE DEGREE OF MASTER IN SURGERY.

Monday, June 25.

				Minimum of Marks required to pass.
Human Anatomy and Physiology	Practical.—College of Medicine	12 to 1	Dr. Nesham.	
Chemistry	Practical.—Chemical Laboratory	1 to 4	Dr. Richardson.	

Tuesday, June 26.

Human Anatomy and Physiology	Vivâ Voce.—College of Medicine	10 to 11	Dr. Nesham.
Chemistry	Vivâ Voce.—College of Medicine	11 to 11·30	Dr. Richardson.

Wednesday, June 27.

Human Anatomy	Printed Paper.—College of Medicine	10 to 1	Dr. Nesham	50 per cent.
Chemistry	Printed Paper.—College of Medicine	2 to 5	Dr. Richardson	35 per cent.

Thursday, June 28.

Physiology	Printed Paper.—College of Medicine	10 to 1	Dr Nesham	50 per cent.

SECOND EXAMINATION FOR THE LICENCE IN MEDICINE, AND THE DEGREE OF MASTER IN SURGERY.

Monday, June 25.

				Minimum of Marks required to pass.
Clinical Surgery . . .	Newcastle Infirmary .	10 to 11	Dr. Heath.	
Clinical Medicine . .	Newcastle Infirmary .	11 to 12	Dr. Embleton.	

Tuesday, June 26.

Medicine	Vivâ Voce.—College of Medicine	11 30 to 1	Dr. Embleton.
Surgery			Dr. Heath.
Midwifery			Dr. Gibson.
Materia Medica . . .	A Quarter of an Hour to be allowed for each Subject		Dr. Arnison.
Botany			Dr. Donkin.
Medical Jurisprudence .			

Wednesday, June 27.

Materia Medica and Botany	Printed Paper.—College of Medicine . . .	10 to 1	Dr. Arnison . . .	35 per cent.
Principles and Practice of Physic	Printed Paper.—College of Medicine . . .	2 to 5	Dr. Embleton . .	50 per cent.
Pathological Anatomy .				

Thursday, June 28.

Principles and Practice of Surgery	Printed Paper.—College of Medicine . . .	10 to 1	Dr. Heath . . .	50 per cent.
Midwifery—Diseases of Women and Children	Printed Paper.—College of Medicine . . .	2 to 5	Dr. Gibson . . .	40 per cent.
Medical Jurisprudence			Dr. Donkin.	

The Examinations in writing usually precede the *vivâ voce* and practical Examinations, but on this occasion the order was changed to suit the convenience of the Visitors.

The questions put to be answered in writing at the First and Final Examinations are appended to this Report. The answers were sent to us for our inspection.

FIRST EXAMINATION.

There were two Candidates.

PRACTICAL.—*Human Anatomy and Physiology.*—The Candidates were required, separately, to prepare a dissection, and to demonstrate the parts to the Examiner; and they were tested as to their power of recognizing anatomical structures through the microscope.

Chemistry.—The Candidates were required, separately, to make a qualitative analysis of two powders and a fluid; and they were tested as to their power of recognizing the constituents of urine by analysis, and urinary deposits by means of the microscope.

VIVA VOCE.—*Human Anatomy and Physiology.*—This Examination was illustrated by means of bones, preparations, and dissections.

Chemistry.—This Examination chiefly turned on substances having more or less relation to Medicine.

FINAL EXAMINATION.

There was one Candidate.

Clinical Surgery.—The Candidate was examined *vivâ voce* in five cases of Surgical injury or disease; and was required to bandage a leg and introduce the catheter.

Clinical Medicine.—The Candidate was examined *vivâ voce* in four cases in diagnosis and treatment.

Viva Voce.—The Examinations in Surgery, Medicine, and Midwifery, were respectively in pathology, diagnosis, and treatment. In Midwifery, parturition was illustrated by the aid of a pelvis and a fœtal head. Materia Medica was illustrated by specimens; and Botany by recent plants, and by means of the microscope. The Examination in Medical Jurisprudence had chiefly reference to poisons.

The practical and *vivâ voce* Examinations, in both the First and Final Examinations, though intrusted in each subject to a single Examiner, were conducted in the presence of other Examiners.

Observations.—The plan and scope of the Examinations are excellent, and such as are calculated to lead Students to apply themselves profitably to the study of the science and practice of Medicine and Surgery. The Candidates presented considerable inequality in their degree of proficiency, but we consider that all were entitled to pass.

(Signed) William Sharpey.
John Storrar.

London, July, 1866.

SUPPLEMENTAL REPORT ON THE EXAMINATION OF THE UNIVERSITY OF DURHAM.

Our attention having been drawn, at the Meeting of the Branch Council for England held on the 26th April, to the absence, in our Report on the Examinations of the University of Durham, of any information on the subject of the Preliminary Examinations in Arts, we have since taken steps to remedy the omission.

A "Durham Registration Examination for Medical Students" having been held in April, we applied, through Dr. Embleton, for permission to inspect some sets of the best and worst answers of Candidates who had passed.

We beg to acknowledge the ready kindness with which the Rev. Francis F. Walrond, Registrar of the University, complied with our request, by forwarding us fifteen sets of answers—six of the best and nine of the worst.

These Examinations are conducted entirely at Durham, the medical officers of the University at Newcastle taking no part in them.

The following is the prospectus of the Examination.

UNIVERSITY OF DURHAM.

Medical Registration Examination,

April 23, *and September* 17, 1867.

SUBJECTS OF EXAMINATION.

The history contained in St. Mark's Gospel.

English Grammar, and writing from dictation.

Arithmetic, including Vulgar and Decimal Fractions.

History of the reign of George III.

To draw from memory an outline map, showing the coast line, the chief ranges of mountains, and the principal rivers of some one of the following countries, to be selected by the Examiners :—

Great Britain.
Italy.
British India.

Questions will also be set in the Geography of these countries.

Translations, with grammatical questions, from some one of the four following subjects, to be selected by the Candidates :—

1. Cæsar, de Bello Gallico, iv.
2. Cicero, de Amicitiâ.
3. Virgil, Æneid iv.
4. Horace, Odes, i.

Any Candidate may, if he pleases, offer himself for examination in any one or more of the three following subjects :—

1. The first book of Euclid.
2. Voltaire's Charles XII.; and French Grammar.
3. Xenophon's Memorabilia; and Greek Grammar.

Candidates who intend to pass an examination in any of these subjects, must signify their intention fourteen days before the examination.

The following Examinations are also accepted as qualifications for Registration :—

Durham Senior Examination of Persons not Members of the University.

Durham Examinations for Students in Arts in their first and second years.

Each Candidate is required to forward the Examination Fee, £1, and a Certificate of Character, one month before the Examination.

Post-office Orders should be made payable to A. BEANLANDS, Esq.

REGISTRATION EXAMINATION OF MEDICAL STUDENTS,

April, 1867.

THE HISTORY CONTAINED IN THE GOSPEL OF S. MARK.

1. What does S. Mark relate of S. John the Baptist?

2. Give the number and the names of the Apostles. What were they commissioned to do when sent forth by our Lord during His own lifetime?

3. Give in your own words the Parable of the Sower. In what place was it first delivered?

4. "My name is Legion." By whom was this said? Relate the whole incident.

5. Give an account of the Saviour's interview with the Syrophœnician woman.

6. Describe the Last Entry into Jerusalem.

7. "Which is the first commandment of all?" When was this question asked, and how was it answered?

8. By whom, and in what manner, was the Lord betrayed?

ENGLISH GRAMMAR.

1. Write down and punctuate the passage read by the Examiner.

2. Define *Grammar, Language, Analysis.*

3. "The science of Grammar comprehends three principal prrts." Explain this.

4. Distinguish between a simple, a complex, and a compound sentence.

5. Explain *Subject, Predicate, "The completion of the Predicate," The extension of the Predicate.*

6. Words are divided into eight classes. Mention these and give examples of each class.

7. Classify common nouns, abstract nouns, pronouns, adverbs. Give instances of each class.

8. Explain *Number Case, Gender.* Mention exceptions to the general rule for the formation of the plural nouns.

9. Point out errors in the following sentences, and state how the rules of Grammar are violated in each case :—

There is, in fact, no houses whatever on one side of the street.

These are the men which we select for our companions.

Will any one bring me their books?

He won't give me none of his flowers.

John have unfortunately broke his leg.

William gave you and I a full account.

His nose is very much like that of my uncle's.

10. Parse the words in the last sentence.

History of the Reign of George III.

1. Sketch the character of George III., and mention any causes which contributed to give stability to his throne.

2. What were the grievances of the American colonies? By what foreign nation were they assisted?

3. Write down anything that occurs to you in justification of the bombardment of Copenhagen.

4. What caused "the Peninsular War"? Sketch very briefly the campaign of Torres Vedras.

5. Give a short account of the Battle of the Nile.

6. Sketch the Indian career of the Marquis Wellesley.

7. What was Napoleon's Berlin Decree?

8. What do you know of Sir Richard Arkwright, James Brindley, Samuel Johnson, Adam Smith, Joseph Priestley, Sir Joshua Reynolds?

Geography.

1. Draw an outline map of the present kingdom of Italy, so as to show its coast line, mountain ranges, and rivers.

2. Mark on the above map the position of as many towns as you consider important, and write an account of the towns so indicated.

3. Mention the chief rivers of England which fall into the sea on the East coast. Through what districts and by what towns do they flow?

4. The *Isle of Skye*—the *Isle of Wight*—the *Malvern Hills*—*Bristol*—*Hull*—*Norwich*—*Aberdeen*. State where the above are situated and what there is to mention about them.

5. What are the chief manufactures of Great Britain, and where are they carried on? From what counties are coal, lead, copper produced?

6. Give an account of the lakes of Scotland. What are the chief capes on its Western coast?

7. Describe the course of the river Clyde, mentioning the towns upon it and its tributaries.

8. Give some account of the political condition and of the productions of British India. What is its population?

9. Name the three chief rivers of India, and trace accurately the course of any one of them.

10. British India is divided into three Presidencies. Name them, and the chief towns in each.

11. What are the principal mountain ranges in India?

12. What is the extent of the Himalaya from East to West, and what are its principal elevations?

Arithmetic.

1. By how much is seventy-one millions, thirty-two thousand five-hundred, greater than eight millions, two hundred and sixty-one thousand and ninety-two?

2. Two factors are 30957 and 839; what is their product?

3. Multiply £4,016 11*s*. 2½*d*. by 94.

4. How many tons of coal can be purchased for £315 3*s*. 10¼*d*., at 17*s*. 3¼*d*. per ton?

5. Reduce 17 tons, 13 cwt., 1 lb., to oz. Avoirdupois.

6. In 537,086 inches, how many miles, furlongs, &c., are there?

7. Add together $12\frac{1}{2}$, $24\frac{3}{4}$, $17\frac{5}{8}$.

Subtract $\frac{3}{5}$ from $\frac{3}{5}$, and £$8\frac{7}{12}$ from £$13\frac{4}{11}$.

Multiply $12\frac{1}{5}$ by $23\frac{3}{5}$, and divide $6\frac{3}{5}$ by $8\frac{7}{8}$.

8. If the whole value of a ship is £4800, what sum of money must be given for $\frac{3}{16}$ of her?

9. Multiply 74·93857 by ·0283.

Divide 4·98152 by ·073 and 7·3.

Reduce 14*s*. 7¾*d*. to the decimal of a pound.

10. Find the income-tax on £17,030 5*s*. at 7*d*. in the pound.

11. What is the tax on a house rented at £327 12*s*. 6*d*., if the tax on a house rented at 35 guineas is £6 8*s*. 7½*d*.?

12. Find the value of 4325 pieces of cloth, each piece being worth £1 16*s*. 8*d*.

13. What must be given for a piece of gold weighing 11 oz., 19 dwts., 16 grs., at the rate of £4 3*s*. 9*d*. per oz.

14. Define Simple Interest, Compound Interest, Discount.

What is the Simple Interest on £2245 for 5 years at $4\frac{3}{4}$ per cent?

We have only to add that we had not an opportunity of seeing those Clinical examinations in Medicine and Surgery to which every candidate is submitted in the wards of the Royal Infirmary; but from the accounts given us of them by the Professors, we have reason to believe that they are conducted very nearly in the same method which is followed at Glasgow and at Edinburgh University examinations. No difficulty, we were told, was experienced in carrying out these Clinical examinations.

ANDREW WOOD.
ALEX. WOOD.
J. G. FLEMING.

APPENDIX.

ADVANCED ANATOMY.

1. Describe the anatomy of the Muscles contained in the Orbit.
2. Describe the Thyroid Body; its parts and relations; its arteries and veins, from their commencement to their termination; and its minute structure.
3. Describe the Lymphatic System as contained in the Mesentery, and the course, relations, and structure of the Thoracic Duct.
4. Name the parts which are brought into view when the Soleus Muscle, Tendo Achillis, and subjacent Fascia have been removed, and give their relative position, and the appearances which they present.
5. Give the structure of the following parts:—(*a*) The Ganglion of a Spinal Nerve. (*b*) A Villus of the Small Intestine. (*c*) The Ovary.

SURGERY.

1. Describe minutely the different steps of the operation of Amputation at the shoulder-joint on the right side.
2. Give the symptoms and diagnosis of an aneurismal tumour in the extremities.
3. How would you treat a case of extravasation of urine from rupture of the urethra?
4. Give the symptoms and pathological conditions in the various stages of Acute Synovitis of the knee joint.
5. Is there any condition of an aneurism in the lower extremities which would render the treatment by deligation or compression improper, and would justify the performance of amputation? If so, state the condition, and the objection to deligation or compression.

6. Describe the operations of Sir W. Fergusson and Mr. Pollock for cleft palate.

7. State briefly the varieties and surgical treatment of internal hæmorrhoids.

Answers to five questions will be considered sufficient.

PRACTICE OF MEDICINE.

1. Give the symptoms of Inflammation of the Liver; and state how you would diagnose it from Inflammation of the lower lobe of the right Lung.

2. Give the symptoms, morbid anatomy, and diagnosis of *Cancer* of the *Pylorus*.

3. Describe a paroxysm of *Epilepsy;* and diagnose this disease, *first*, from *Hysteria*, and, *secondly*, from *Apoplexy*.

4. Give the symptoms of *Tabes Mesenterica;* and state, *first*, the diseases with which it may be confounded, and, *secondly*, the only pathognomonic symptom by which it can be distinguished.

5. Give the Diagnosis between *Ascites* and *Ovarian Dropsy;* and the treatment for Ascites resulting from disease of the Liver. And, in connexion with this, write at least *two* 'prescriptions' (with full directions for the exhibition of the medicines ordered) in Latin, without abbreviations or symbols. Explain, also, the *therapeutic action* of the medicines prescribed.

6. Give (1.) the symptoms; (2.) the physical signs; and (3.) the morbid appearances met with in the three stages of Pulmonary Consumption; and give the *rationale* of the *physical* signs.

7. What is *Endo-Carditis*, and what the structural lesions (within the heart) resulting from it? State the circumstances under which it usually occurs, and the age at which it is most apt to occur. State, also, (1.) the symptoms; and (2.) the physical signs of it.

8. Give (1.) the symptoms; (2.) the causes; and (3.) the treatment of *Hæmatemesis*. And give *two* 'prescriptions' for the remedies suitable for it, in Latin, without abbreviations or the use of symbols.

Answer any five of the questions.

MIDWIFERY.

1. What are the changes that take place in the Uterus, previous to the Ovum reaching it?

2. Describe a true labour-pain; give the diagnosis between it and

a false pain; and say how you would distinguish the pain of labour from the pain of inflammation.

3. Define an *impacted* head and an *arrested* head. What are the dangers to be apprehended from the long continuance of either of these states?

4. Name the various methods proposed for the induction of premature labour; the cases suited for it; and the causes which interfere with its success.

5. How would you recognise prolapse of the bladder (*vaginal cystocele*) during labour? And give the treatment.

6. In Breech and Footling cases, when is danger to the child to be apprehended? State the danger and the treatment.

Answer any five of the questions.

MEDICAL JURISPRUDENCE.

1. Enumerate the successive changes occurring in the human body after death, up to the commencement in it of Putrefaction, adducing these in their natural order, and giving the average dates of the appearances of each.

2. Mention the different classes of agents had recourse to in criminal attempts to procure Abortion, and explain their several modes of action.

3. Give the appearances you would expect to encounter in the body after death by Shock.

4. Give a detailed account of the symptoms caused by a poisonous dose of laudanum, and the readiest method of detecting its presence in the stomach after death.

XI.

University of Glasgow.

VISITATION of the PRELIMINARY EXAMINATIONS in Arts for the Medical Degrees of the University of Glasgow —26*th October and* 15*th November* 1866.

We were not personally present at these examinations; but as they are conducted entirely by written papers, that is not of consequence. In reply to our request we have been favoured with data sufficient

to enable us to form a judgment as to the way in which they are conducted. These data are—I. The printed themes; II. A statement by the University registrar of the results of the Examinations; and III. A selection, as suggested by ourselves, of the written answers for our perusal and consideration. We proceed to make some remarks under each of these heads.

I. *The printed Themes.*—These we have printed in the Appendix to this Report. Our impression, from a perusal of them, is that in some respects they seem scarcely to reach the standard which should be required from candidates seeking entrance into a learned profession. In the English themes, for example, there is no mention of 'writing to dictation,' which we deem of importance; the questions, too, in English grammar, especially in the first of the English themes, are too simple, and can hardly be considered as sufficient to test an acquaintance with the construction of the language. The Latin themes embrace nothing more than the simple translation of two short passages from classical authors. We should desiderate exercises in parsing, and also, what is at once a fair and excellent test of a candidate's knowledge of the structure of the language, the translation of an English sentence into Latin (the words, though not in their grammatical construction, being supplied as in Mair's Introduction). These are tests which ought not to be difficult to any candidate who has even a moderate acquaintance with Latin, and are calculated to guard against mere cramming of translations of books or passages. With regard to the Mathematical themes, we may suggest a doubt whether the tests applied are quite up to the standard which should be required. We think that these might be extended, and made somewhat less simple.

II. *The results of the Examinations.*—It appears, from the statement furnished us officially, that at the two examinations an aggregate of 77 students presented themselves as candidates. Of these, 69 obtained certificates of having passed, and 8, who failed to write exercises on all the prescribed subjects, or whose papers were otherwise unsatisfactory, were rejected. Of the rejected papers, 2 were in English, 4 in Latin, 2 in Arithmetic, 3 in Geometry, and 1 in Mechanics.

III. *Specimens of the Written Answers.*—Of these, as requested by us, 18 sets were transmitted to us, embracing 3 classes, viz.—1. Superior; 2. Middling and inferior; and 3. Not sufficient, and Rejected. After carefully perusing the greater proportion of these answers, we are satisfied that no candidate was rejected who did not amply deserve rejection; but we are not equally satisfied that some of those whose answers are included in the 'middling and inferior' class

were such as should have been allowed to pass. In the case of some who did pass, the spelling seemed very deficient. We the more particularly refer to the matter of bad spelling, because we have reason to know that not unfrequently this is found occurring in the written professional examinations of various boards, where it becomes a source of embarrassment to the examiners, a circumstance which could not happen if this deficiency were checked in the bud, as it ought to be, during the preliminary examinations.

ANDREW WOOD, M.D.
ALEX. WOOD, M.D.

APPENDIX.

MEDICAL STUDENTS' PRELIMINARY EXAMINATION.

October 1866.

ENGLISH.—(*One Hour allowed.*)

1. Give the punctuation of the following piece; either transcribing it, or marking it on this printed paper, and enclosing it in the paper with your answers:—

Our bugles sang truce for the night cloud had lower'd
And the sentinel stars set their watch in the sky
And thousands had sunk on the ground overpower'd
The weary to sleep and the wounded to die

When reposing that night on my pallet of straw
By the wolf scaring faggot that guarded the slain
At the dead of the night a sweet vision I saw
And thrice ere the morning I dream'd it again

Methought from the battle fields dreadful array
Far far had I roam'd on a desolate track
Twas autumn and sunshine arose on the way
To the home of my fathers that welcom'd me back

I flew to the pleasant fields travers'd so oft
In life's morning march when my bosom was young
I heard my own mountain goats bleating aloft
And I well knew the strains that the corn reapers sung

Then pledg'd we the wine cup and fondly I swore
From my home and my weeping friends never to part
My little ones kiss'd me a thousand times o'er
And my wife sobbed aloud in her fulness of heart

Stay stay with us rest thou art weary and worn
And fain was their war broken soldier to stay
But sorrow return'd with the dawning of morn
And the voice in my dreaming ear melted away

2. How do you distinguish a participle from any other adjective? And an adverb from a conjunction? Give examples from the poetry in question.

3. Write a letter to a medical friend, as if from the seat of war this summer, or as if after visiting the Austrian or Prussian hospitals.

LATIN.—(*One Hour allowed.*)

Translate the following passage—

Cæsar, necessariis rebus imperatis, ad cohortandos milites, quam in partem fors obtulit, decucurrit et ad legionem decimam devenit. Milites non longiore oratione cohortatus, quam uti suæ pristinæ virtutis memoriam retinerent, neu perturbarentur animo hostiumque impetum fortiter sustinerent, quod non longius hostes aberant quam quo telum adjici posset, proelii committendi signum dedit. Atque in alteram partem item cohortandi causa profectus pugnantibus occurrit. Temporis tanta fuit exiguitas hostiumque tam paratus ad dimicandum animus, ut non modo ad insignia adcommodanda, sed etiam ad galeas induendas scutisque tegimenta detrudenda, tempus defuerit. Quam quisque ab opere in partem casu devenit quæque prima signa conspexit, ad hæc constitit, ne in quærendis suis pugnandi tempus dimitteret.

O socii, (neque enim ignari sumus ante malorum)
O passi graviora; dabit Deus his quoque finem.
Vos et Scyllæam rabiem penitusque sonantes
Accestis scopulos; vos et Cyclopia saxa
Experti. Revocate animos, mœstumque timorem
Mittite. Forsan et hæc olim meminisse juvabit.
Per varios casus, per tot discrimina rerum,
Tendimus in Latium: sedes ubi fata quietas
Ostendunt. Illic fas regna resurgere Trojæ.
Durate, et vosmet rebus servate secundis.

ARITHMETIC.

1. Express $\frac{7}{1\,2\,3}$ as a decimal fraction.

2. Multiply $\frac{9}{2\,6}$ by $\frac{1\,3}{2\,7}$; divide the product by $\frac{5}{6}$; and, finally, subtract the quotient from $\frac{3}{4}$.

3. A person pays the sum of £250 for a share of Bank stock of which the original value is £100, and a dividend of 10 per cent. is declared on the original value of the stock: what rate of interest does he receive on the money invested?

EUCLID.

1. Define parallel straight lines: and give Euclid's axiom respecting them.

2. Draw a straight line at right angles to a given straight line from a given point in the same.

3. Prove that the opposite sides and angles of parallelograms are equal, and that the diameter bisects them.

MECHANICS.

1. State the parallelogram of forces; and give an experimental illustration of it.

2. If the apparent weight of a body when placed in one scale of a false balance be three quarters of a pound, and when placed in the other scale, 27 ounces, what is the true weight of the body? and what is the ratio of the lengths of the arms of the beam?

3. What is the condition necessary that a body may rest when placed on a smooth horizontal plane?

November 1866.

LATIN.—(*One Hour.*)

Translate the following passages:—

Sic ait, et dicto citiùs tumida æquora placat;
Collectasque fugat nubes, solemque reducit.
Cymothoë, simul et Triton adnixus, acuto
Detrudunt naves scopulo: levat ipse tridenti;

Et vastas aperit syrtes, et temperat æquor ;
Atque rotis summas levibus perlabitur undas.
Ac, veluti magno in populo quum sæpe coorta est
Seditio, sævitque animis ignobile vulgus,
Jamque faces et saxa volant ; furor arma ministrat :
Tum, pietate gravem ac meritis si fortè virum quem
Conspexere, silent, adrectisque auribus adstant ;
Iste regit dictis animos, et pectora mulcet :
Sic cunctus pelagi cecidit fragor, æquora postquam
Prospiciens genitor, cœloque invectus aperto,
Flectit equos, curruque volans dat lora secundo.

Eâ re constitutâ, secundâ vigiliâ, magno cum strepitu ac tumultu castris egressi, nullo certo ordine, neque imperio, quum sibi quisque primum itineris locum peteret, et domum pervenire properaret, fecerunt, ut consimilis fugæ profectio videretur. Hâc re statim, Cæsar, per speculatores cognitâ, insidias veritus, quòd, quâ de causâ discederent, nondum perspexerat, exercitum equitatumque castris continuit. Primâ luce, confirmatâ re ab exploratoribus, omnem equitatum, qui novissimum agmen moraretur, præmisit. His Q. Pedium, et L. Aurunculeium Cottam, legatos præfecit. T. Labienum legatum cum legionibus tribus subsequi jussit.

ENGLISH.—(*One Hour.*)

Is this a dagger which I see before me
The handle toward my hand Come let me clutch thee
I have thee not and yet I see thee still
Art thou not fatal vision sensible
To feeling as to sight or art thou but
A dagger of the mind a false creation
Proceeding from the heat-oppressed brain
I see thee yet in form as palpable
As this which now I draw
Thou marshall'st me the way that I was going
And such an instrument I was to use
Mine eyes are made the fools o' the other senses
Or else worth all the rest I see thee still
And on the blade and dudgeon gouts of blood
Which was not so before

(1.) Insert the punctuation in the foregoing passage.
(2.) Note any words of Latin origin.

(3.) Give synonyms for these.

(4.) Mention the adjectives, and give the derivation of those which are not primitive words.

(5.) Write a letter of moderate length as to a father, telling him that his son met with an injury, or was taken ill, when coming to town along with you.

ARITHMETIC.

1. Divide 534964 by 275.
2. If five yards of ribbon cost 1s. 10d., how many can be bought for £6, 13s. 10d.
3. Add together $\frac{1}{3}$, $\frac{3}{5}$, and $\frac{3}{7}$.
4. Reduce $\frac{7}{9}$ to a decimal.
5. Multiply 3786·21 by ·095.
6. How many pieces of paper, 12 yards long and 28 inches broad, are required to paper a room 24 feet long, 18 feet broad, and 12 feet high?

EUCLID.

1. Bisect a given rectilineal angle, that is, *divide it into two equal angles.*
2. If a straight line falling upon two other straight lines, in the same plane, make the alternate angles equal to one another, these two straight lines are parallel.
3. The opposite sides and angles of a parallelogram are equal to one another, and the diagonal bisects it.

MECHANICS.

1. What is meant by the parallelogram of forces?
2. What is meant by stable and unstable equilibrium?
3 Explain the principle of the pulley.

XII.

University of Glasgow.

VISITATION OF EXAMINATION for Medical and Surgical Degrees in University of Glasgow—26*th July* 1866.

The particular examinations which were in progress during our visit this day were the *oral* examination in advanced Anatomy by Professor Allen Thomson, the written of the practical examination in Medicine by Professor Gairdner, Clinical examinations in Surgery at the Royal Infirmary by Professor Lister, and (partially) Clinical examinations in Medicine at the Royal Infirmary by Professor Gairdner.

I. *The examination in advanced Anatomy* by Professor Thomson, Dr. Coats, non-professorial Examiner, being also present.—We heard several Students orally examined. The Professor had beside him the written answers to the printed questions (a copy of which questions we append). These answers we had an opportunity of perusing, and were satisfied that they had been fairly but strictly judged. Dr. Thomson explained to us that in some cases he exempts from the written examination students who have obtained high marks in his Class examinations;—in the present instance, three out of thirty-three candidates had been so exempted. Dr. Thomson gives no exemption whatever from the oral examination. The oral examination was conducted in a highly practical and demonstrative manner, by means of numerous dried and wet specimens, and on carefully-made dissections in the dissecting room—the ankle and neck being the parts chosen on this occasion. The test so applied seemed to us in every respect excellent, being particularly characterized by the clearness and fairness with which the questions were put, so that if the candidate could not answer them it was through his own ignorance.

II. *The written examination in Medicine* was going on under Professor Gairdner (the printed questions we append). One hour is allowed for the answers. Fourteen candidates were under examination at the time of our visit. We put the question to the Professor whether any exemptions had been given on the ground of high marks in his Class examinations. The Professor stated that none had been exempted on this occasion; that two were entitled to claim exemption, had they chosen, but that they had not done so. Had they done so they would have been entitled to exemption from this examination,

and also, as we understood, from the oral examination in Medicine, but not to exemption from the examination in Clinical Medicine, to which every candidate without exception is submitted. We think it is a question for the Medical Council to determine whether they consider that in any case students, however distinguished in their Class examinations, should be exempted from either the written or the oral examination for the degree. In the University of Glasgow, those of the Professors who grant such exemptions (for some, we believe most, of the Professors, do not grant them) believe that the placing such a premium on proficiency in Class examinations has an admirable effect on a student's course of study, and may indeed probably take the place of final examinations. We cannot agree with this view, holding that these written Class examinations, however valuable as aids to teaching, do not and cannot supply that test which written, and especially oral degree examinations, are calculated to give. It is one thing for a student to answer in writing, step by step, as he does in Class examinations, questions on the subjects of the Professor's lectures, and another and a very different thing to be ready to bring forth his knowledge on any part of the subject of lectures at the usual final examinations. Part of these Class examinations must necessarily take place, too, before the period fixed by the Medical Council as the earliest period at which candidates should be entitled to be examined. Besides this, many candidates come for examination from other schools, where no such system obtains; they therefore cannot possibly claim exemption, and thereby an undue advantage is given to the candidates whose whole course has been taken at the University. It appears, too, to be a fatal objection to this system, that it assumes the power of dispensing with oral examination, which is enjoined alike by the statutes of the Glasgow University and by the regulations of the Medical Council, and which we consider to be an indispensable part of the test of the qualifications of Medical practitioners. We deem it right thus shortly to state our views here on this question, in order that the matter may be discussed and decided upon by the General Medical Council.

Some of the written answers in the examination on Medicine, at which we were present, were subsequently transmitted to us, with the decision of the Professor upon them. We were satisfied that they were very fairly and judiciously decided regarding.

III. *Examination on Surgical cases at the bedside*, by Professor Lister, and Dr. Fleming, non-professorial Examiner.—This examination we were present at in the Royal Infirmary. The way in which it

was conducted was this : The candidates, eight in number, we believe, on this occasion, were shut up in a side-room. They were then called out one by one into the Surgical Wards, and shown at the bed-side, and made to explain, by means of numerous practical questions, four different cases. The cases on this occasion were one of fracture of the lower extremity, put up with a long splint; one of elbow-joint disease; one of disease of the tarsal bones; one of syphilitic condylomata of the anus. The candidates were in addition made to apply a bandage to the leg. We were greatly pleased with the way in which the examination was conducted, and especially pleased to observe how much practical knowledge could be tested in a moderate space of time without inconvenience to the patients. We are satisfied that Clinical examinations, both in Surgery and Medicine, are not only quite practicable, but also extremely desirable, if not quite essential, because not only are candidates thus tested in a most important way, but the knowledge that they are to be so examined leads to greater attention on their part to the details and progress of hospital cases during their course of hospital study.

The Clinical examinations in Medicine at the Glasgow University were unfortunately all over at the time of our visit, but Professor Gairdner kindly put in our hands the following clear statement of the method of conducting them, which we deem it of importance to give here unabridged :—

'Clinical Examinations in Medicine, *July* 1866.

'*Examiners*—Drs. Gairdner and Coats.

'*Cases employed for Examination.*

'*a.* Several cases of phthisis in all stages, of which one had pleuritic complication.

'*b.* One case of tubercular diarrhœa, the pulmonary affection incipient and secondary.

'*c.* Several cases of cardiac disease, chiefly of aortic and mitral regurgitation.

'*d.* One case of evident, and one of obscure aneurism (arch of aorta, innominate artery).

'*e.* One case of enlargement of liver, probably with cancerous nodules.

'*f.* One case of thickening of pylorus.

'*g.* Several cases of skin-disease, chiefly eczema, in different stages.

'*h.* One case of acute pneumonia in course of resolution, but with sputa still characteristic.

'The above-mentioned cases were employed as follows :—In the first

instance each candidate was placed at the bedside of one of the selected cases (a different case being assigned to each candidate), and desired to examine it and master the details, unassisted, recording the facts only so far as to assist his own memory, but not for inspection as a written report. In other instances a brief written report of the facts was required, to be supplemented, however, by oral statements. Time given at bedside of patient, from twenty to forty-five minutes.

'Candidates were then called up one by one, and desired to state verbally, *first*, facts observed; *second*, diagnosis; *third* (in some cases), prognosis, with reference to treatment. Candidates were allowed to use their own written notes of the case, and questioned by the Examiners on particular points incidentally arising.

'*i.* As a supplementary examination, candidates were required to observe, during a limited time, and with all the necessary precautions and instrumental assistance, a special and limited group of phenomena, say, *e.g.*, a cardiac murmur, an enlarged liver, a diseased pylorus with distended stomach, an eruption on skin. Time given, five to ten minutes. Questions were afterwards put by the Examiners, tending to elicit in detail the candidate's observations and views on diagnosis, nomenclature, classification, etc., and on the particular facts observed in the case submitted.

'Examination of urine, conducted as follows:—Twelve to eighteen specimens of urine, in urine-glasses, collected with a view to showing miscellaneous deposits and other alterations, and including also healthy urines of various shades of amber colour. These specimens were ranged on a table, three or four of them, however, being removed for sake of light to window-sill. *k.* Candidates were called in successively, and desired to make any observations that occurred to them upon the whole series. Questions were asked by Examiners, in particular instances, as regards colour, acidity, alkalinity, specific gravity, sediment, and the result of these observations as leading to a definite or indefinite diagnosis. In the course of these observations, saccharine and albuminous urines, deposits of oxalate of lime, urate of ammonia, phosphates, uric acid, and mixed deposits, were under review. *l.* Simple lenses, with power from ten to fifty diameters, were put into the hand of the candidate, if required, but no other instrumental assistance was allowed at this stage. *m*, *n*. Afterwards, individual specimens were given to candidates for more complete examination by microscope and chemical tests.

'The above gives a pretty clear idea of the range and method of this examination upon the whole. It is not, however, meant to be affirmed that each individual candidate was examined over the whole range, as

above described. Each candidate was, however, liable to the whole, and was in fact examined in two or three departments, the last portions of his examination being often suggested specially by the deficiencies or excellences appearing in the first.

'W. G. Gairdner.
'J. Coats.'

Professor Gairdner also kindly exemplified briefly his method on two candidates who had already passed. As a part of the examination he gave them specimens of urinary deposits, which they were required to test. They were directed afterwards to transmit to us, in writing, the result of their investigation. This they did. We found it most satisfactory. We have no hesitation in highly commending the Clinical examinations in Medicine in Glasgow University, equally with the Surgical Clinical examinations, as above referred to.

Andrew Wood.
Alex. Wood.

APPENDIX.

ADVANCED ANATOMY.

1. Describe the several bands of nervous substance which form the peduncles of the crus cerebelli, and explain the connexions established by them between the cerebellum and other parts of the encephalon.

2. Describe the minute structure of the uriniferous tubes of the kidney, and state their relation to the blood-vessels.

3. Give a description of the position, course, and relations of the common carotid artery of the left side, and state the principal differences in that of the right side.

4. Give a short account of the development of the aortic arch, and explain from this the general nature of its malformations.

PRACTICE OF MEDICINE.

Answer three, *but not more than* three, *of the following questions :—*

1. Describe briefly, but characteristically, the principal pathological states of the urine which can be discovered by a microscopical examination.

2. Describe chorea, its relations to age and sex; indicate appropriate treatment, and prescribe.

3. What circumstances have to be considered in examining cases of insanity supposed to require detention 'under care and treatment'? What must a medical certificate affirm, and upon what evidence as to facts, in such a case?

4. Indicate the distinctive characters of the friction-sound in pericarditis, and its diagnostic value at different stages of the disease.

5. State in general terms what you consider to be good treatment in a case of acute pneumonia; and show, in doing so, that you are aware of the differences of opinion that exist upon the subject.

N.B.—*The Examiners do not expect or require in this answer that the views of the candidate shall coincide with their own, but will rather attach importance to such evidence of real knowledge as may justify an independent opinion.*

XIII.

University of Glasgow.

REPORT OF VISITATION of Preliminary Examination in General Education for the Degree of M.B. of the University of Glasgow—12*th April* 1867.

We have inspected the printed themes (which we append to this Report) and a large selection of the written answers in this examination, which is conducted entirely in writing.

We cannot report this examination to be as efficient as we think it ought to be. Though the themes in English and Latin are considerably in advance of those regarding which we had to report unfavourably at our last visitation of this preliminary examination, yet the Mathematical papers are still, in our opinion, pitched too low in all the branches of the subject.

With regard to the results of the examination, we find that of 40 candidates who gave in written exercises, 22 passed; and that of the others, 7 failed in English, 7 in Latin, 10 in Arithmetic, 9 in Euclid, and 9 in Mechanics. This is undoubtedly a large proportion of remissions; nevertheless, after very carefully perusing the papers, we are satisfied that not a few of those who were allowed to pass, ought to have been remitted, their papers being in essential points defective.

Andrew Wood.
Alex. Wood.

APPENDIX.

PRELIMINARY MEDICAL EXAMINATION.

April 12th, 1867.

One hour allowed. Write your name with your answers.

ENGLISH.

1. Supply the punctuation of the following piece of piece of poetry ; either marking it on this printed paper, and returning it with your answer, or else transcribing the whole :—

Ill fared it then with Roderick Dhu
That on the field his *targe* he threw
Whose brazen *studs* and tough bull-hide
Had death so often dashed aside
For trained *abroad* his arms *to* wield
Fitz-James's *blade* was sword and shield
He practised *every* pass and ward
To thrust to strike to *feint* to guard
While less *expert though* stronger far
The Gael maintained unequal war
Three times in closing strife they stood
And thrice the Saxon blade drank blood
No *stinted* draught no scanty tide
The gushing flood the tartans dyed
Fierce Roderick felt the fatal drain
And *showered* his blows like wintry rain
And as firm rock or castle roof
Against the winter shower is *proof*
The foe invulnerable still
Foiled his wild rage by steady skill
Till at advantage taen his brand
Forced Roderick's weapon from his hand
And *backwards* borne upon the lea
Brought the proud Chieftain to his knee

2. Give the meaning of the last four lines, in your own language, in ordinary prose.

3. Give synonyms for the words in italics, and tell what part of speech each of them is.

4. The words 'practise,' 'feint,' 'Gael,' occur here. Distinguish them from 'practice,' 'faint,' 'gale.'

5. The widow of a medical man in the country thinks of sending her boys to town to study, or otherwise to push their way. Write her a letter, offering your advice or assistance.

LATIN.

1. Translate—

Dixit et avertens rosea cervice refulsit,
Ambrosiæque comæ divinum vertice odorem
Spiravere; pedes vestis defluxit ad imos;
Et vera incessu patuit dea. Ille ubi matrem
Agnovit, tali fugientem est voce secutus;
Quid natum toties, crudelis tu quoque, falsis
Ludis imaginibus? cur dextræ jungere dextram
Non datur, ac veras audire et reddere voces?
Talibus incusat gressumque ad moenia tendit.
At Venus obscuro gradientis aëre sæpsit;
Et multo nebulæ circum dea fudit amictu:
Cernere ne quis eos neu quis contingere posset,
Molirive moram aut veniendi poscere causas.
Ipsa Paphum sublimis abit sedesque revisit
Læta suas, ubi templum illi, centumque Sabæo
Ture calent aræ sertisque recentibus halant.

2. What is the force of *re* in composition? Illustrate by examples.

3. Distinguish *hic*, *ille*, *iste*—*mœnia*, *murus*—*incessus*, *gressus*.

4. Where was Paphos?

5. Translate—

Horum adventu tanta rerum commutatio facta est, ut nostri, etiam qui vulneribus confecti procubuissent, scutis innixi, prælium redintegrarent; tum calones, perterritos hostes conspicati, etiam inermes armatis *occurrerunt;* equites vero, ut turpitudinem fugæ virtute delerent, omnibus in locis pugnæ se legionariis militibus præferrent. At hostes etiam in extrema spe salutis tantam virtutem *præstiterunt*, ut, quum primi eorum cecidissent, proximi jacentibus insisterent, atque ex eorum corporibus pugnarent; his dejectis et coacervatis cadaveribus, qui superessent, ut ex tumulo, tela in nostros *conjicerent* et pila intercepta remitterent: ut non nequidquam tantæ virtutis homines judicari

deberet ausos esse transire latissimum flumen, ascendere altissimas ripas, subire iniquissimum locum : quæ facilia ex difficillimis animi magnitudo *redegerat.*

6. Parse and conjugate the verbs in italics.

7. Mention some verbs of the first conjugation, which make the perfect in *ui.*

8. Compare *extremus, proximus.*

ARITHMETIC.

1. Add together the fractions $\frac{13}{108}$, $\frac{25}{112}$, and $\frac{19}{126}$.

2. Divide ·010125 by 4·5.

3. A person buys 100 lbs. of tea at 3s. per lb., and 50 lbs. at 5s.; he mixes the whole together, and sells the mixture at 4s. 6d. per lb.: what is his gain or loss per cent. on the transaction?

EUCLID.

1. Define a plane rectilineal angle; and show how to bisect it.

2. Prove that any two sides of a triangle are together greater than the third side.

3. Equal triangles, upon the same base, and upon the same side of it, are between the same parallels.

MECHANICS.

1. If 3 forces acting at a point be represented in direction and magnitude by the sides of a triangle taken in order, prove that they are in equilibrium.

2. A uniform straight rod, 3 feet in length, weighs 1 lb.; what weight must be fastened at one end in order that it may balance on a smooth horizontal peg distant 4 inches from loaded extremity?

3. What is meant by the centre of gravity of a body? Explain how the position of the centre of gravity affects the stability of the equilibrium of the body, when it is suspended from a fixed point.

XIV.

University of Glasgow.

VISITATION of EXAMINATION for Medical and Surgical Degrees in University of Glasgow—2*d May* 1867.

The examinations in progress during my visit to-day were the oral examinations in Practice of Medicine and Materia Medica. The candidates had been previously subjected to a written examination. (The printed themes in Medicine I append, those on Materia Medica have accidentally not reached me.) The printed themes on Medicine seem to be very searching, practical, and judicious. I read some of the written answers, and was satisfied with the decision regarding them. Professor Gairdner informed me that the candidates had all previously been examined Clinically in the medical wards of the Royal Infirmary. He has furnished me with the following statement regarding the Clinical examinations of the present year, as supplementary to that more detailed statement which will be found in No. XII. of the present series of Reports :—

'Glasgow, 6*th May* 1867.

'The Clinical examinations for this term of graduation have been conducted on nearly the same principles as stated in July of last year (1866), but from the number of candidates (40 for the degree of M.B.), it has been considered advisable to distribute their examination (Clinically) over several weeks in April, so as to secure a sufficient variety and number of new cases. About six candidates, on an average, have been examined at each sitting, and the results have been, on the whole, most satisfactory. A very marked increase in the attention paid to Clinical details throughout the winter session has been apparent. I am fully convinced (as indeed has been my opinion for years), that no feature in modern medical education is likely to be of more importance than the impulse given to practical studies in Medicine and Surgery, wherever such examinations can be thoroughly carried out. W. T. Gairdner.'

These views of Professor Gairdner will be seen to be completely in accord with those which have been expressed by the Visitors in several of the present series of Reports, and are worthy of the attention of the Medical Council.

The examination in Materia Medica was conducted by Professor Cowan, and Dr. Fleming, non-professorial examiner. Numerous specimens were employed. I heard several candidates examined, and was well satisfied with the examinations themselves, and the decisions regarding them.

Further, I have to report, that I have been informed by Professor Allen Thomson that the system of granting exemption from any of the professional examinations on account of superior attainments as shown at class examinations has been discontinued.

ANDREW WOOD.

APPENDIX.

PRACTICE OF MEDICINE—26*th April* 1867.

Candidate to answer three, *but not more than* three, *of the following questions :*—

1. Give a short description of the stages, and the phenomena in each stage, of an attack of Acute Pericarditis.

2. State briefly the principles ruling the treatment of simple Diarrhœa, and of Acute Dysentery; and give examples of prescriptions in both.

3. In the course of a case regarded as one of Phthisis, and having many of the characters of Tubercular disease, the following facts are somewhat unexpectedly ascertained :—

'A woman, aged twenty-seven. All over the left side, and as low in the lower lateral region as anywhere else, *a prolonged and almost musical resonance*[1] accompanies both inspiration and expiration, equally prolonged with the latter as with the former. Percussion is rather tympanitic over left side generally. In the right apex, cavernous phenomena of the most distinct kind are heard, with bubbling and gurgling râles down to the third or fourth rib, but not any sounds of the character heard on left side. Below fourth rib, respiratory murmur on right side is almost normal.'

What History and Symptoms are to be expected in a case of this

[1] It would have been easy to define this sound by using the word 'amphoric, but it would have been too directly suggestive, and hence this somewhat indefinite phrase. Several of the replies gave to the expression underlined the sense of sonorous or sibilant râle.—W. T. G.

kind, and what would be the probable pathology, and the morbid appearances in the dead body, in the event of a fatal issue?

4. A boy of twelve years of age has had, almost from infancy, a degree of discharge from both ears; the discharge not very copious, but variably so, and generally more or less purulent, and fetid. In the right ear he is deaf. The general health rather delicate, but not decidedly impaired. The discharge had its origin apparently from an acute disease, probably scarlet fever, which, however, had no other permanent sequela. In the midst of the state of health above described, it is rather suddenly observed that the right side of the mouth is paralysed, and that the corresponding eyelid cannot be closed. After this, and at an interval, there follow rigors, pain in the head, transitory blindness, remittent febrile attacks, vomiting; the pain in the head is, upon the whole, the most persistent and distressing of the symptoms. There is tenderness on pressure over the right mastoid process, and obscure puffy swelling; all these symptoms are relieved for a time by a much more profuse discharge than ordinary from the right ear, of extremely fetid character. The mind is, up to this time, unaffected. The pain, however, recurs, attacks of partial coma supervene; rigors and feverishness continue; the other symptoms described are present in various degrees at different times, and at times relief is obtained apparently by renewed discharge. At last sudden coma supervenes, with convulsions, dilated pupils, and death.

Explain, as far as you can, the connexion of the phenomena in this rather unusual case, and compare it with certain well-known types of disease, as regards particular groups of symptoms.

No. XV.

Royal Colleges of Physicians and of Surgeons of Edinburgh.

13th May 1867.

By appointment of the Branch Council, I have to report upon the examination in General Education of the Royal College of Physicians and Surgeons of Edinburgh, held on the 27th and 29th April 1867.

The examination was conducted entirely by written exercises upon printed papers. These were sent to me for inspection. Not having been present at the examination, I cannot give any opinion as to the precautions taken to prevent the candidates from making use of undue

assistance; but I am informed that the attention of the Examiners is alive to this matter.

The examination comprises exercises in the three following essential subjects, viz.—1. English Grammar and Composition; 2. Latin, by translation of a passage from a prose author and another from a poetical author, together with parsing and the reading in Latin of an English passage for which the Latin words are supplied; and 3. Arithmetic, including Vulgar and Decimal Fractions. In addition to these, the examination comprehends exercises in any two of the following eight subjects, selected by the candidate, viz., Algebra, Geometry, Natural Philosophy, Greek, French, German, Botany, and Zoology.

The whole examination occupies two days, and candidates are allowed to appear for a part or a whole of the subjects.

The Examiners are the following:—

Professor Kelland, for Mathematics and Natural Philosophy.

Dr. Andrew Wood, for Latin, Greek, and German.

Dr. Archibald Inglis, for English, French, Zoology, and Botany.

At the examination of 27th and 29th April, 23 Candidates in all appeared, of whom several had passed in one or more subjects previously. Of these, eight were found qualified to receive certificates of having passed the required subjects.

The following is a detailed statement of the results in particular subjects:—

	Whole Number Examined.	Passed.	Rejected.
English,	14	11	3
Latin,	18	7	11
Arithmetic,	15	9	6
Algebra,	9	3	6
Geometry,	4	3	1
Natural Philosophy (Mechanics and Hydrostatics),	5	4	1
Greek,	2	2	0
French,	4	4	0
German,	2	1	1
Zoology,	2	1	1
Botany,	1	1	0

From an inspection of the exercises of the several candidates, I am inclined to believe, although I do not pretend to judge of the exact scale of excellence, as indicated by numbers, that the exercises of those who passed showed sufficient proficiency, and that those rejected were fairly not accepted, and I am therefore led to regard this examination as well calculated to secure a proper foundation for medical study, and to elevate the standard of education of the profession generally.

ALLEN THOMSON.

APPENDIX.

April 27, 1867.

ENGLISH.

The Candidate is required :—

1. To write a passage dictated by the Examiner, with strict attention to spelling and punctuation.

2. To parse such parts of the passage thus written, and to give the Etymology of such words as the Examiner shall require.

3. To correct the errors in spelling, punctuation, and grammar in the following sentences :—

' The mechanism of clocks and watches were then totaly unknown.'

' The Cape of Good Hope as well as many islands, in the West Indies are famous for huricanes.'

' We are alone here's none, but thee and I.'

4. To construct from the following notes a continuous narrative, paraphrasing the words given more or less according to the taste of the candidate :—

Fable of the Frog who wished to make himself as large as an ox.

An ambitious frog.—A stately ox.—Envy excited.—Abortive attempts to enlarge himself.— Ridiculous results of the first and second. —Disastrous issue of the third.—Moral.

Or,

To describe, in the form of a letter to a friend, the principal objects of some town, or the most striking features of some district of country with which the candidate is familiar.

LATIN.

I.

Quanto erat in dies gravior atque asperior oppugnatio, et maxime quod, magna parte militum confecta vulneribus, res ad paucitatem defensorum pervenerat, tanto crebriores litteræ nunciique ad Cæsarem mittebantur : quorum pars deprehensa in conspectu nostrorum militum cum cruciatu necabatur. Erat unus intus Nervius, nomine Vertico, loco natus honesto, qui a prima obsidione ad Ciceronem perfugerat, suamque ei fidem præstiterat. Hic servo spe libertatis magnisque persuadet præmiis, ut litteras ad Cæsarem deferat. Has ille in jaculo illigatas effert ; et Gallus inter Gallos sine ulla suspicione versatus ad Cæsarem pervenit. Ab eo de periculis Ciceronis legionisque cognoscitur.—Cæs. *Bell. Gall.* Lib. v.

Give the positive and superlative of *gravior*, *asperior*, and *crebriores*, —give the positive and comparative of *maxime*.

Parse *defensorum*,—parse *necabatur*—conjugate the verb—say from what it is derived,—parse *cruciatu*—say from what it is derived—and give the English words derived from this root,—parse *servo*—and give the reason for its case,—parse *deferat*—give the principal tenses of the verb,—parse *cognoscitur*—conjugate the verb.

Numerical value, 50.

II.

Ætatis cujusque notandi sunt tibi mores,
Mobilibusque decor naturis dandus et annis.
Reddere qui voces jam scit puer, et pede certo
Signat humum, gestit paribus colludere, et iram
Colligit ac ponit temere, et mutatur in horas.
Imberbis juvenis, tandem custode remoto,
Gaudet equis canibusque, et aprici gramine campi;
Cereus in vitium flecti, monitoribus asper,
Utilium tardus provisor, prodigus aeris,
Sublimis, cupidusque, et amata relinquere pernix.

Hor. *Ars. Poet.*

Parse *notandi*—say from what the verb is derived, and give English words derived from this root,—parse *gestit*,—what case is *paribus*, and why?—parse *colligit*—conjugate the verb—say of what it is compounded,—from what is the adjective *imberbis* derived?—conjugate *gaudet*,—from what are *cereus* and *pernix* derived?

Numerical value, 50.

III.

Render into correct Latin, from the words supplied, the following passage:—

Alexander, when he had overrun India, came to a rock of wonderful ruggedness and height, into which many people had fled; and when he understood that Hercules had been restrained by an earthquake from the taking of that rock, being seized with a desire of outdoing the actions of Hercules, he made himself master of the rock with the utmost fatigue and danger.

Alexander, peragratus India, pervenio ad saxum mirus asperitas et altitudo, in qui multus populus confugio; et ubi cognosco Hercules prohibitus terra motus ab expugnatio idem saxum, captus cupido superandum factum Hercules, potior saxum cum summus labor ac periculum.

Numerical value, 50.

To pass, 100 marks must be obtained.

April 29, 1867.

GREEK.

(*Xenophon's Anabasis, Book I.*)

Ἐπεὶ δὲ ὑμεῖς οὐ βούλεσθε συμπορεύεσθαι, ἀνάγκη δὲ μοι ἢ ὑμᾶς προδόντα τῇ Κύρου φιλίᾳ χρῆσθαι, ἢ πρὸς ἐκεῖνον ψευσάμενον μεθ' ὑμῶν ἴεναι, εἰ μὲν δὴ δίκαια ποιήσω οὐκ οἶδα, αἱρήσομαι δ' οὖν ὑμᾶς, καὶ σὺν ὑμῖν ὅτι ἂν δέῃ πείσομαι. καὶ οὔποτε ἐρεῖ οὐδεὶς ὡς ἐγὼ Ἕλληνας ἀγαγὼν εἰς τοὺς βαρβάρους, προδοὺς τοὺς Ἕλληνας τὴν τῶν βαρβάρων φιλίαν εἱλόμην, ἀλλ' ἐπεὶ ὑμεῖς ἐμοὶ οὐ θέλετε πείθεσθαι οὐδὲ ἕπεσθαι, ἐγὼ σὺν ὑμῖν ἕψομαι καὶ ὅτι ἂν δέῃ πείσομαι. νομίζω γὰρ ὑμᾶς ἐμοὶ εἶναι καὶ πατρίδα καὶ φιλοὺς καὶ συμμάχους, καὶ σὺν ὑμῖν μὲν ἂν οἶμαι εἶναι τίμιος ὅπου ἂν ὦ, ὑμῶν δὲ ἔρημος ὢν οὐκ ἂν ἱκανὸς εἶναι οἶμαι οὔτ' ἂν φίλον ὠφελῆσαι οὔτ' ἄν ἐχθρὸν ἀλέξασθαι. ὡς ἐμοῦ οὖν ἰόντος ὅπῃ ἂν καὶ ὑμεῖς, οὕτω τὴν γνώμην ἔχετε.

Parse προδόντα, ψευσάμενον, πείσομαι, εἱλόμην. Compare τίμιος. Decline οὐδεὶς.

Numerical value, 50.

(*Lucian.*)

Ὁ δὲ τὴν πορφυρίδα οὑτοσὶ, καὶ τὸ διάδημα, ὁ βλοσυρὸς, τίς ὢν τυγχάνεις; ΛΑΜΠ. Λάμπιχος, Γελώων τύραννος. ΕΡΜ. Τί οὖν, ὦ Λάμπιχε, τοσαῦτα ἔχων πάρει; ΛΑΜΠ. Τί οὖν; ἐχρῆν, ὦ Ἑρμῆ, γυμνὸν ἥκειν τύραννον ἄνδρα; ΕΡΜ. Τύραννον μὲν οὐδαμῶς, νεκρὸι δὲ μάλα· ὥστε ἀπόθου ταῦτα. ΛΑΜΠ. Ἰδού σοι ὁ πλοῦτος ἀπέῤῥιπται. ΕΡΜ. Καὶ τὸν τῦφον ἀπόῤῥιψου, ὦ Λάμπιχε, καὶ τὴν ὑπεροψίαν· βαρήσει γὰρ τὸ πορθμεῖον συνεμπεσόντα. ΛΑΜΠ. Οὐκοῦν ἀλλὰ τὸ διάδημα ἔασόν με ἔχειν, καὶ τὴν ἐφεστρίδα. ΕΡΜ. Οὐδαμῶς· ἀλλὰ καὶ ταῦτα ἄφες. ΛΑΜΠ. Εἶεν· τί ἔτι; πάντα γὰρ ἀφῆκα, ὡς ὁρᾷς. ΕΡΜ. Καὶ τὴν ὠμότητα, καὶ τὴν ἄνοιαν, καὶ τὴν ὕβριν, καὶ τὴν ὀργὴν, καὶ ταῦτα ἄφες. ΛΑΜΠ. Ἰδού σοι ψιλός εἰμι. ΕΡΜ. Ἐμβαινε ἤδη.

Parse τυγχάνεις, πάρει, ἐχρῆν, ἀπόθου, συνεμπεσόντα. Compare μάλα. Give the derivation of ὑπεροψίαν.

Numerical value, 50.

Candidates must have 75 marks to pass.

FRENCH.

Charles surmonta tous les obstacles, avançant toujours vers le Borysthène. Il rencontra sur son chemin vingt mille Moscovites retranchés dans un lieu nommé Hollosin, derrière un marais, auquel on

ne pouvait aborder qu'en passant une rivière. Charles n'attendit pas pour les attaquer que le reste de son infanterie fût arrivé; il se jette dans l'eau à la tête de ses gardes à pied; il traverse la rivière et le marais, ayant souvent de l'eau au-dessus des épaules. Pendant qu'il allait ainsi aux ennemis, il avait ordonné à sa cavalerie de faire le tour du marais pour prendre les ennemis en flanc. Les Moscovites, étonnés qu'aucune barrière ne pût les défendre, furent enfoncés en même temps par le roi, qui les attaquait à pied, et par la cavalerie suédoise.

Parse *avançant*, *rencontra*, *pouvait*, *fût arrivé*, *allait*, — parse *prendre*, and give the first person singular of each tense of the indicative mood.

GERMAN.

Der König verlor nunmehr keine Zeit, seine Absichten auf die Stadt Mainz auszuführen, in welche sich der Kern der spanischen Truppen geworfen hatte. Indem er jenseit des Rheinstroms gegen diese Stadt anrückte, hatte sich der Landgraf von Hessen-Kassel diesseits des Flusses derselben genähert, und auf dem Wege dahin mehrere feste Plätze unter seine Botmässigkeit gebracht. Die belagerten Spanier, obgleich von beiden Seiten eingeschlossen, zeigten anfänglich viel Muth und Entschlossenheit, das Aeuszerste zu erwarten, und ein ununterbrochenes, heftiges Bombenfeuer regnete mehrere Tage lang in das schwedische Lager, welches dem Könige manchen braven Soldaten kostete. Aber dieses muthvollen Widerstands ungeachtet gewannen die Schweden immer mehr Boden und waren dem Stadtgraben schon so nahe gerückt, dass sie sich ernstlich zum Sturm anschickten. Jetzt sank den Belagerten der Muth. Mit Recht zitterten sie vor dem wilden Ungestüm des schwedischen Soldaten, wovon der Marienberg bei Würzburg ein schreckhaftes Zeugniss ablegete.

Decline *Der König*. Give the German for 'a queen.'

Parse *verlor*, *gebracht*, *eingeschlossen*, *gewannen*. Give the present, imperfect, and first future tenses, and present participle of each of these verbs. What is the plural of *stadt?* What is the German word for a 'citizen?' Decline the masculine and feminine of the adjective '*wild*.' What does the noun '*Wild*' mean?

ARITHMETIC.

(*Six questions correctly solved will suffice.*)

1. Multiply 18 cwts. 3 qrs. 17 lbs. 5 ozs. by 37.
2. Divide £1456, 14s. into 19 equal parts.

3. If bread be 9d. a loaf, and butter $15\frac{1}{2}$d. a lb., how many lbs. of butter must be given in exchange for 558 loaves?

4. Reduce 10 miles, 5 furlongs, 2 yards to feet.

5. Add together $2\frac{1}{2}$, $3\frac{1}{3}$, $5\frac{1}{5}$, and $9\frac{1}{10}$.

6. Express 2s. $7\frac{1}{2}$d. as the decimal of a £.

7. Find, by practice, the cost of 11 cwts. 3 qrs. $17\frac{1}{2}$ lbs. at £12, 16s. 6d. per cwt.

8. What is the yearly dividend on £5567 Consols (3 per cent.)?

9. How much Consols at £$90\frac{1}{2}$ per cent. can be purchased with £1000, the commission for the purchase being 2s. 6d. per cent.?

10. The price of gold is £3, 17s. $10\frac{1}{2}$d. per oz. troy, how many grains does a sovereign weigh?

11. If $\frac{1}{3}$ of an estate be worth £1000 less than $\frac{2}{5}$ of it: what income-tax does it pay, at 4d. in the £?

12. Two equal glasses are both filled with mixtures of wine and water, in the proportions respectively of 1 : 5 and 1 : 6. When both are mixed together, what is the proportion of wine to water in the mixture?

GEOMETRY.

(*Five propositions correctly demonstrated will suffice.*)

1. If from the ends of the base of a triangle two straight lines be drawn to a point within the triangle, their lines shall be together less than the other two sides of the triangle but shall contain a greater angle.

2. If a straight line falling upon two other straight lines makes the alternate angles equal to one another, these two straight lines shall be parallel.

3. Parallelograms upon equal bases and between the same parallels are equal to one another.

4. If the square described on one side of a triangle be equal to the squares described upon the two other sides, the angle contained by those sides is a right angle.

5. If a straight line be divided into two equal and also into two unequal parts, the rectangle contained by the unequal parts, together with the square of the line between the points of section, shall be equal to the square of half the line.

6. To divide a given straight line into two parts, so that the rectangle contained by the whole line and one of the parts may be equal to the square of the other part.

7. Two straight lines which meet one another within a circle at any point which is not the centre do not bisect one another.

8. The angle in a semi-circle is a right angle, and the angle in a segment less than a semi-circle is greater than a right angle.

ALGEBRA.

(Six questions correctly solved will suffice.)

1. If $a=2$, $b=3$, $c=5$, $d=0$, find the value of $\frac{a^2}{b}+\frac{b^2}{c}+\frac{d^2}{a-b}$ and of $(a+b)\ d+(b+c)\ a+(c+d)\ b$.

2. From $\frac{1}{3}\ (a-b+c-d)+\frac{1}{5}\ (a-b-\overline{c-d})$.
   Take $\frac{1}{2}\ (a+b-\overline{c+d})-\frac{1}{3}\ (a+b+c-d)$.

3. Multiply x^2-3x+2 by $2-x$.

4. Divide $1000x^2y^2z$ by $10xy^2z$; and $2ax^2-a^3-x^3$ by a^2+ax-x^2.

5. If $x+y=7$ when $x=3$, what is the value of $\frac{1}{x}+\frac{1}{y}$ for the same value of x?

6. Extract the square root of
   $9a^4-12a^3b+28a^2b^2-16ab^3+16b^4$.

7. Find the sum of $\frac{a}{a-b}+\frac{b}{b-a}$ and of $\frac{1}{x-y}-\frac{1}{x+y}-\frac{2y}{x^2-y^2}$.

8. Solve the following equations :—

   (1.) $\frac{x}{2}+\frac{x}{3}-\frac{x}{4}=7$.

   (2.) $2(x-1)\ (x-2)=(2x-1)\ (x-4)$.

9. It is found that if the books of A and B be united, the balance to credit shown by them is £900; if those of A and C be united, the balance to credit is £200; and if those of B and C be united, the balance to credit is £300. Required whether C's books exhibit a credit or a debit; and how much?

10. The wages of five men and four women amount to £12, 16s., and seven men receive more than six women by £4. What does each receive?

NATURAL PHILOSOPHY.

(50 per cent. of correct answers will suffice.)

1. Distinguish the characteristic properties of a solid, a liquid, and a gas.

What is the relation of pressure to density in a gas? How is the elasticity of a solid measured? and the friction?

2. Two bodies respectively weighing 12 and 13 lbs. balance at the extremities of a lever 25 inches long. Where is the fulcrum? Give an example of a lever in which the power and weight are on the same side of the fulcrum.

3. Define the centre of gravity. How may the centre of gravity of an irregular plane figure be determined experimentally? Find the centre of gravity of a triangle.

4. Enunciate the three laws of motion. Illustrate the second law, and give a demonstration of the proposition, that when a body falls by the action of gravity the spaces are proportional to the squares of the times.

5. The weight of water is 1000 oz. per cubic foot. What is the pressure on a square foot of the side of a dam 25 feet below the surface of the water? Does this pressure depend on the size of the dam, or its shape, as well as on its depth? What is meant by the hydrostatic paradox?

6. Describe the common pump. What are the limits to its working, and why?

BOTANY.

(*The Candidate is required to answer* four *of the following questions.*)

1. Describe the structure of the leaves of Exogenous plants:—1*st*, As observed on their upper and under surfaces. 2*d*, As observed on making a section through their substance.

2. Give some of the reasons for supposing that the parts composing a flower are modified leaves.

3. State what is meant by each of the following terms:—Stipula, bract, involucellum, carpel, ovary, cotyledon, petiole.

4. What is the function of leaves in regard to the growth of a plant? What are the changes they produce on the air with which they are in contact? How are these changes modified by the presence or absence of sun-light?

5. Give the characteristics of the Natural Order Rosaceæ. Enumerate the principal groups into which it is subdivided. Name some of the most familiar plants belonging to it.

6. Describe the process of germination in the seeds of flowering plants. What are the conditions necessary to its taking place? How is the young plant nourished at the earliest period of its growth?

ZOOLOGY.

(*The Candidate is required to answer* four *of the following questions.*)

1. Give the principal particulars in which, besides the possession of a vertebrate skeleton, the *Vertebrata* differ from the other Divisions of the Animal Kingdom.
2. Give the principal Subdivisions of the Class *Reptilia*, and the characters of each.
3. Give the distinctive characters of the *Rodentia*, *Pachydermata*, and *Marsupialia*.
4. State the differences between the Respiratory system of the terrestrial and that of the marine *Gasteropoda*.
5. Give the distinctive characters of the *Insecta*, and enumerate the principal subdivisions of the Class.
6. Describe a Cuttle-fish both as to external appearance and internal structure.

XVI.

ROYAL COLLEGES OF PHYSICIANS AND OF SURGEONS OF EDINBURGH.

REPORT BY MR. SYME ON THE PROFESSIONAL EXAMINATION FOR THE DOUBLE QUALIFICATION BY THE COLLEGES OF PHYSICIANS AND OF SURGEONS OF EDINBURGH—*May* 20, 1867.

DURING the present month, in compliance with instructions from the Medical Council for Scotland, I have visited the Professional examinations to which the Edinburgh College of Physicians and Surgeons subject the candidates for their Double Qualification. These examinations are conducted in the rooms of the College of Surgeons by Examiners from both bodies, who sit in pairs at their respective tables, on which there are numerous articles illustrative of the subjects in question. The questions seemed to me judiciously selected, fairly put, and calculated to elicit the real amount of knowledge.

I have also examined the papers which were written previously to

the oral examination, and found them very creditable to their authors. They are taken into account according to their degree of merit; but, however excellent, are not allowed to supersede the oral examination. (Appended are the questions proposed at the written examination.)

Since the period of my visit, I am informed that the College of Surgeons has resolved to institute practical examinations in the hospital, which will tend to render the system pursued still more perfect; since, although diagnosis can hardly be regarded as a safe criterion of the candidate's acquirements, there can be no doubt that a correct judgment as to their amount is wonderfully facilitated by examining him in relation to the living being.

On the whole, I feel warranted to state that the examinations which I was desired to visit are in all respects worthy of the two bodies on whose part they have been established. JAMES SYME.

APPENDIX.

SECOND PROFESSIONAL EXAMINATION.

The Themes to be returned by the Candidate along with his written Answers.

PRACTICE OF MEDICINE.

Four questions, *of which* three *are to be answered, and not more.*

1. What are the favourable and what the unfavourable prognostic symptoms in a case of Typhus fever about the tenth day of the disease?

2. With what general disorder is Chorea frequently associated? To what class of nervous diseases does it belong? Describe the features of an attack. What are the most approved remedies in its treatment?

3. Mention the forms of valvular disease of the left side of the heart, and the murmurs which are characteristic of each.

4. What diet would you prescribe in a case of inflammatory irritation of the stomach? Specify the articles of diet you would prohibit, and those you would allow.

SURGERY.

Four questions, *of which* three *are to be answered, and not more.*

1. State under what circumstances excision of the mamma is justifiable, and the contra indications to an operation. Describe the mode of performing excision, and the principal vessels which may be expected to bleed.

2. Describe the condition of the Blood-vessels and Blood in acute Inflammation, and the results of the inflammatory process.

3. Describe the morbid anatomy, symptoms, results, and treatment of a case of Inflammation of the cavity of the Tympanum. Point out particularly the circumstances in a case of chronic discharge from the Ear, which would make you guarded in your prognosis as to the result.

4. How is fracture of both bones of the leg at its lower third recognised? If displacement has taken place, what variety of fracture has most likely occurred? In what direction are the fragments generally displaced, and why? Mention the different kinds of treatment.

SURGICAL ANATOMY.—One Question.

Describe the Anatomy of the parts of the cheek implicated in the incisions usually recommended for excision of the Superior Maxilla; and indicate from anatomical facts the line of incision which, when practicable, should be preferred.

MATERIA MEDICA.

Three questions, *of which* two *are to be answered, and not more.*

1. How is Nitrate of Silver prepared? In what form, and in what dose, should it be prescribed? What are its therapeutic actions when administered internally?

2. In the treatment of what diseases is Arsenic employed? What are the principal indications that the system is fully under its influence?

3. What are the ordinary doses of the following medicines:—Tincture of Aconite—Tincture of Digitalis—Powder of Nux Vomica—Extract of Belladonna.

Write (in full) a prescription for an alkaline mixture in a case of Uric Acid Diathesis.

MIDWIFERY.

Three questions, *of which* two *are to be answered, and not more.*

1. Describe the stages of Natural Labour, its mechanism and management.
2. At what period after birth does the umbilical cord separate? Should Hæmorrhage supervene on separation, how would you treat it?
3. How would you resuscitate an Asphyxiated child?

MEDICAL JURISPRUDENCE.

Three questions, *of which* two *are to be answered, and not more.*

1. A dead body having been found submerged, how would you distinguish a case of drowning from one of submersion after death?
2. What are the symptoms of poisoning by Digitalis, and what treatment should be adopted?
3. What are the symptoms, treatment, and post-mortem appearances of poisoning with Oxalic Acid?

XVII.

Faculty of Physicians and Surgeons of Glasgow.

VISITATION of the Professional Examinations for the Diploma of the Faculty of Physicians and Surgeons of Glasgow, by Professor Syme and Dr. Andrew Wood.—15*th May* 1867.

We this day visited these examinations. We found the oral examinations in progress, the subjects being Anatomy, Chemistry, Physiology, Surgery, Surgical Anatomy, Medicine, Materia Medica, Midwifery, and Medical Jurisprudence. The candidates had previously been examined on these subjects, in writing, on separate days: four and a-half hours being allowed on the first day, and six hours on the second day. (The themes we append to this Report, *vide* Appendix.) We perused the written answers of the two candidates whom we heard examined, and found that they had been carefully gone over by the Examiners, and fairly judged.

The standard of judgment at present employed by the Faculty, both in the written and in the oral examinations, is this :—1. Excellent; 2. Good; 3. Passable; 4. Scarcely Passable; 5. Bad. We were informed that unless where the papers are essentially defective, it is the practice of the Faculty to allow the candidate to go on to an oral examination.

At the oral examination of this day, we found that there was one table for Anatomy and Chemistry, with two Examiners; a second for Physiology, with two Examiners; and a third for Surgery, Surgical Anatomy, Medicine, Materia Medica, Midwifery, and Medical Jurisprudence, with three Examiners. The time during which each candidate was examined seemed to vary according to his style of answering, but he was examined for not less than a quarter of an hour on each subject. The Examiners, we were informed, are specially appointed to examine on special subjects.

The Chemistry examinations were illustrated by specimens of chemicals, the Anatomical examinations were illustrated by bones, dried preparations, and dissections, and were largely demonstrative, searching, and satisfactory. We had not an opportunity of being present at the Physiological examinations, but we were present for a considerable time at the examinations on Surgery, Medicine, etc. The questions seemed to us to be put fairly and clearly, and so as to elicit the real knowledge of the candidates. The decisions seemed to us to be fair, and in accordance with the appearance made by the candidates.

We were altogether well satisfied with what we saw of these examinations. We would, however, suggest that it would be desirable in this, as in all the examinations by Surgical Boards, that the candidates should be tested practically in bandaging and the application of Surgical apparatus, as well as clinically on suitable surgical cases in the hospital. However important the written and oral examinations may be, yet, to make the test complete, such practical and clinical examinations seem to be requisite. As the subject has been more than once alluded to in this series of Reports, we do not enlarge upon it here, but have only to say that we consider it one well worthy the consideration of the Medical Council.

James Syme.
Andrew Wood.

APPENDIX.

FIRST PROFESSIONAL EXAMINATION.

15*th May* 1867.

N.B.—*Candidates are expected to answer at least Two Questions on each subject.*

ANATOMY.

1. Describe the origins, insertions, and actions of the muscles by which flexion and extension of the Knee-joint are produced.
2. Enumerate the trunks and branches of the nerves which communicate Sensation to the Face, and the power of motion to its muscles.
3. Describe the mucous membrane of the duodenum, ileum, and colon, pointing out the varieties which it presents in these regions respectively.

PHYSIOLOGY.

1. Describe the course of an impulse exciting sensation from the sentient tissue to the brain; and of a volitional impulse from the brain to the muscles.
2. What are the chief proximate elements of the food of man; and under what conditions does each of them undergo digestion in the alimentary canal?
3. State the forces which cause and regulate the circulation of the blood; describing differentially the offices therein of the heart and arteries.

CHEMISTRY.

1. State the qualitative and quantitative tests of Sugar in Urine, and the modes of their action.
2. Give the formulæ for the Sulphates, Nitrates, and Carbonates of Lead, Copper, and Iron.
3. Describe the modes of preparation of the compounds of Chlorine with Mercury.

SECOND PROFESSIONAL EXAMINATION.

SURGERY AND SURGICAL ANATOMY.

1. State the course and relations of the Femoral Artery, and describe the operation for its ligature in Scarpa's Space.

2. What is traumatic Tetanus: what are its causes and symptoms, and how is it treated?

3. What is 'Malignant Disease;' what are its more usual forms, the pathological changes which it produces, and what the localities which it usually affects?

PRACTICE OF MEDICINE.

1. Describe the 'Hobnail' disease of the Liver, including the symptoms and pathological changes; and state the principles of treatment.

2. What inferences are to be deduced from the changes during acute disease of the temperature of the body as indicated by the thermometer?

3. Name the principal Entozoa found in the human alimentary canal, describing their characters, and briefly their natural history.

MATERIA MEDICA.

1. Whence is Sulphate of Quinia procured, and what is the process for its preparation?

2. Mention the various drugs which act specially on the liver; distinguishing the cases in which they may respectively be used; and describing their special effects.

3. Write in full a prescription for a Diuretic mixture, containing three ingredients.

MIDWIFERY.

1. Mention the circumstances which suggest the employment respectively of the Long Forceps, Embryotomy, and the Cæsarean Section.

2. Describe the operation of Vaccination, and mention, in their order, the appearances which follow its successful performance.

3. Under what circumstances would you administer *Ergot of Rye*, and in what cases would you consider its administration improper and dangerous?

MEDICAL JURISPRUDENCE.

1. Explain what is meant by a *Narcotic Poison* : name two or three substances under this class ; state the symptoms of poisoning by opium, and the tests for the drug.

2. What is meant by *Cadaveric Rigidity ;* what are the times after death of its appearance and disappearance ; and what circumstances retard or accelerate its occurrence?

3. What are the signs and symptoms of recent delivery ?

CONFIDENTIAL.]

REPORTS

OF THE

VISITORS OF EXAMINATIONS

DEPUTED BY THE

BRANCH COUNCIL FOR IRELAND,

ON THE 29TH OF JUNE, 1866.

CONTENTS.

CONFIDENTIAL.]

No. 1.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE QUEEN'S UNIVERSITY IN IRELAND.

Visitor:—Dr. LEET.

EXAMINATIONS for Degrees in Medicine and Surgery are held in Dublin Castle in the months of June, September, and October. Each Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—

1*st*. To have passed, in one of the Colleges of the Queen's University, the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.

2*nd*. To have attended, in one of the Queen's Colleges, lectures on one modern Continental Language for six months.

3*rd*. To have also attended, in some of the Queen's Colleges, at least two of the Courses of Lectures marked with an asterisk in the list on pp. 54 and 55 (see 'Calendar.') For the remainder of the Courses authenticated Certificates will be received from the Professors or Lecturers in Colleges or Schools recognized by the Senate of the Queen's University in Ireland.

4*th*. To pass two University Examinations—the First University Examination and the Degree Examination.

The Curriculum extends over at least four years, and is divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination prior to entering on the second period.

The Examination for the Degree of M.D. comprises the subjects recommended for study during the second period of Medical Education, along with Experimental Physics and one Modern Language, unless an Examination in these subjects shall have been already passed at the First University Examination.

The Examination for the Degree of M. Ch. comprises, in addition, an Examination in Operative Surgery.

Having been appointed by the Irish Branch of the General Council of Medical Education and Registration, I visited several Examinations for the

Medical and Surgical Degrees of the Queen's University held during the year 1866. They are carried on by *vivâ voce* questions and by printed papers.

Each Candidate receives in all about twenty questions upon each subject.

The Candidates are placed at separate tables, furnished with writing materials, and with a copy of the printed papers, which contains on an average ten questions.

Three hours are allowed jointly for the *vivâ voce* and written Examinations; the *vivâ voce* occupies about ten minutes of the time.

The Examinations are conducted partly by the Professors of the Queen's Colleges, and partly by *additional* Examiners chosen by the Senate of the University from the profession at large.

The Professors examine on their respective departments of Science, selecting for examination Students who are attached to other Colleges than the one they are themselves connected with.

The *additional* Examiners take charge of the practical departments of Medicine and Surgery.

The questions were well chosen and had mostly a practical bearing. (Copies of the printed papers of questions are appended to the Report.) Each Examiner inserts in a table the numbers which he allots to the Candidates for their answers to the questions put by him, and, when the body of Examiners assemble to make their combined Report to the Senate, the Examiners take into account the credit awarded to each Candidate in all the subjects in which he has been examined. When the Candidate's judgments reach a certain standard, he is passed, and no Candidate is rejected without being subjected to a further examination.

The oral answering in general was good, but this part of the examination was too brief to be satisfactory. The majority of the manuscript exercises were carefully written, and exhibited much sound knowledge; but some few were so defective in English orthography and in the Latin language as showed that laxity had existed somewhere in the Matriculation Examination. I was satisfied, however, that none of the writers of these defective Papers were held deserving of Degrees.

I was also present at the Examinations in Operative Surgery, where the Candidates are required to perform one or more of the minor and major operations; this important test the Candidates passed through most creditably.

I consider that the Examinations for Degrees in Medicine and Surgery in the Queen's University are conducted with great care and impartiality, but that the system needs to be modified in the following particulars:—

1. The appointment of a special and independent Board for conducting the Entrance Arts' Examination.

2. That not less than two Examiners be present during the examination of every Candidate, and that a definite amount of answers be required from each Candidate upon the several subjects in the curriculum.

3. That more time be given to the oral Examination of Candidates, and that they be subjected to practical and demonstrative tests wherever they can be applied.

Before concluding this Report, I have to acknowledge the great courtesy with which I was received by the Professors of the University, and I beg to return my best thanks to Mr. Stoney, the efficient Secretary of the University, for the trouble he took to inform me upon every point connected with the Examinations.

It is a matter of regret that the other member of the Branch Council, who was nominated to act with me in this visitation, did not attend.

(Signed) CHARLES H. LEET.

THE QUEEN'S UNIVERSITY IN IRELAND,

DUBLIN CASTLE.

FIRST EXAMINATION IN MEDICINE.

September 29, 1866.—*Morning.*

CHEMISTRY.

(Professor ANDREWS.)

1. What are the tests for lime and magnesia, and how would you apply them to the analysis of a fusible calculus?

2. State in symbols the reactions that occur in the preparation of sulphuretted hydrogen from sulphide of iron, and also from sulphide of antimony; state also the composition by weight and by volume of this gas, and how it may be analyzed.

3. What is the average composition of expired air, and how would you analyze it?

4. Give an account of the acetic acid fermentation, and of the chemical changes which accompany it.

(Professor BLYTH.)

5. How would you ascertain the neutrality of the salt of a bibasic acid? Give examples by formulæ of neutral and basic salts of a bibasic acid.

6. How is arsenuretted hydrogen prepared? How would you distinguish it from the corresponding compound of antimony?

7. What are the chief sources of bromine? Give the mode of preparing it, its properties and the compounds it forms with oxygen and with hydrogen.

8. By what means is albumen in urine detected? What precautions in some cases are necessary for success in detecting it?

(Professor ROWNEY.)

9. Give the method of preparing calomel; state its composition and properties.

10. State the laws of combination by weight and volume.

11. What is meant by isomorphism? Give some examples of isomorphous bodies.

12. Mention the principal sources from whence chloride of sodium is obtained, and state the uses to which this salt is applied.

September 29, 1866.—*Afternoon.*

BOTANY.

(Professor MELVILLE, M.D.)

1. Describe the structure of the Ovule; mention its various forms and their characteristics.

2. Define the terms Flagellum, Bracteola, Glomerulus, Staminodium, Arillus.

(Professor GREENE, B.A.)

3. Give examples, from the British Flora, of plants with (*a*) verticicillate, (*b*) peltate, (*c*) dissected, and (*d*) succulent leaves.

4. Having regard to the annexed scheme, describe, in a series of paragraphs, any dicotyledonous plant which you have particularly examined :—

(*a.*) *Stem.*
(*b.*) *Leaves.* Arrangement.
(*c.*) ——— Stipulation.
(*d.*) ——— Composition.
(*e.*) ——— Form.
(*f.*) ——— Margin and Incision.
(*g.*) ——— Venation.
(*h.*) *Inflorescence.* General character.
(*i.*) ——————— Bracteal appendages.
(*j.*) *Flower.* Peculiarities of perianth.
(*k.*) ——————————— stamens, noticing insertion.
(*l.*) ——— Disk.
(*m.*) ——— Pistil, as to ovary, style, stigma, and placentation.
(*n.*) *Fruit.* General character.
(*o.*) —— Dehiscence.
(*p.*) —— Seed and Embryo.

(Professor WYVILLE THOMSON, LL.D.)

5. Describe the structure of the flower in grasses.

6. Describe the structure of the flower and the mode of reproduction in the Coniferæ.

ZOOLOGY.

(Professor MELVILLE, M.D.)

Vertebrata.

1. State the essential characters of the class Reptilia.

2. Describe the structure of the foot in the various orders of Birds.

Invertebrata.

3. Describe the structure of a Rotifer.

4. Mention the divisions of the Cephalopoda, and state their characteristics.

(Professor GREENE, B.A.)

Vertebrata.

5. Give the dental formulæ of the cat, dog, horse, cow, and pig.

6. What essential character distinguishes the circulatory system of Reptiles from that of Birds and Mammals?

Invertebrata.

7. Describe the branchiæ of the common oyster, or of any other bivalve Mollusc.

8. Compare the nervous system of the Leech, on the one hand, with that of an insect,—on the other, with that of the trematode Entozoa.

(Professor WYVILLE THOMSON, LL.D.

Vertebrata.

9. Describe the alimentary canal of the ox, and contrast it with that of the dog.

10. Describe the peculiarities of the anterior extremity of the mole.

Invertebrata.

11. Describe the structure of (*a*) amæba, and (*b*) vorticella.

12. Describe generally the vascular system of a lobster.

October 1, 1866.—*Morning.*

ANATOMY.

(Professor CORBETT, M.D.)

1. Describe the shaft and extremities of the tibia; mention the muscles and tendons connected with it.

2. Describe the articular surfaces of the bones and the ligaments of the shoulder joint; also state the relations of muscles and tendons with respect to it.

(Professor REDFERN, M.D.)

3. Describe the characters and position of the origin and insertion of the serratus magnus muscle, as well as its relations and action.

4. Describe the characters and extent of the origin and insertion of the obturator internus muscle, with its relations and action.

(Professor CLELAND, M.D.)

5. Describe the external iliac artery, indicating the places of origin of its branches.

6. Describe the reflections of the pleural sacs, and also the anterior mediastinum.

October 1, 1866.—*Afternoon.*

PHYSIOLOGY.

(Professor CORBETT, M.D.)

1. State the use and general characters of areolar tissue; describe its features when examined under the microscope.

2. What are the textures composing the coats of arteries, and what office may be assigned to the principal tunics?

(Professor REDFERN, M.D.)

3. How much blood will fill one of the cavities of the heart? How much will fill the whole of the arteries? How much blood is there in the adult human body, and how can this amount be estimated?

4. What is the relative size of the air-vesicles of the human lung in the fœtal state, in infancy, adult age, and advanced life; on the surface and in the central parts of the lungs respectively? Describe the septum between the air in two adjacent air-vesicles.

(Professor CLELAND, M.D.)

5. Describe the manner of the movement of the urine from the pelvis of the kidney to the orifice of the male urethra, and the agencies by which the movement is effected.

6. Describe the mucous membrane and glandular structure of the stomach.

October 2, 1866.—*Morning.*

MATERIA MEDICA AND PHARMACY.

(*Examiner*, Dr. W. D. MOORE.)

1. How is the extractum opii liquidum prepared; what is its strength, what the full dose for an adult, and what advantages does the preparation possess?

2. How is the linimentum belladonnæ prepared? How much stronger is it than the tincture?

3. Write an unabbreviated prescription, in Latin, for a cough mixture for an adult, with directions for use, the ingredients being mucilage, water, syrup of squills, and tincture of camphor with opium. State how much of the same might safely be given to a child of a year old, and at what intervals.

4. Give the name and natural family of the Stramonium plant; describe its capsule; mention its medical uses and its pharmacopœial preparations.

5. Describe the pharmacopœial tests for tartarated antimony; enumerate the various therapeutic actions of the salt, and state the dose in which you would prescribe it to produce each effect.

6. Give the formula, specifying the quantities, for the enema opii of the British Pharmacopœia.

7. What is the most usual specific gravity of the syrups of the British Pharmacopœia?

8. Enumerate the weights, giving their values in grains, in use in the Pharmacopœia. State also the fluid measures and their equivalents.

9. What is the strength of the tincture of iodine? What is the use of the iodide of potassium in this preparation?

10. In what doses would you prescribe tincture of hyoscyamus?

October 3, 1866.—*Morning.*

EXPERIMENTAL PHYSICS.

(Professor STEVELLY, LL.D.)

1. Describe the wheel and axle, and give the ratio of the power to the resistance which will equilibrate it, the one acting tangentially to the wheel, the other to the axle.

2. State some of the experimental proofs that atmospheric air has the property of weight, and explain how the weight of a given volume (say 100 cubic inches) of it is determined.

3. Describe the operation of cupping, and explain on what pneumatic principle the blood is driven from the scarified skin into the receiving cup as the air within it cools.

4. Explain the difference between a reflecting and a refracting telescope. Show that the two objects to be obtained by each are the same, though the optical method of attaining one of them is different.

5. State the law which governs the attractive and repulsive powers of the poles of magnetic bars or needles, and explain what is meant by their directive power.

6. Explain how a magnet can be made to produce an electric current in a conducting wire coiled round a soft iron core. State how this electric effect is most easily rendered apparent, and some of the phenomena it is found capable of producing.

(Professor ENGLAND, M.A.)

7. A piece of lead, which weighs in air 40 grains, is introduced into a specific gravity bottle which is capable of holding 250 grains of distilled water; the bottle being then filled with water, the united weight of the lead and water is 282 grains; what is the specific gravity of the lead?

8. How is the chromatic aberration corrected in the compound microscope?

9. How is the steel-yard graduated? Why is it not as accurate as the balance of equal weights?

10. What do you mean by consequent points in a magnetic bar?

11. Describe the ordinary galvanometer, and explain the action of the several parts of the current on each of the magnetic needles.

12. What do you mean by disguised or latent electricity?

(Professor CURTIS, LL.D.)

13. Explain the principle of the turbine?

14. By what experiment may the porosity of a piece of oak be exhibited?

15. What property of the crystalline lens appears contrary to the laws of refraction? State the theory of vision based on this property.

16. How may a non-luminous flame be made luminous?

17. How may it be shown that in a magnet the magnetic fluids are present in all parts of the bar?

18. Describe the two ways in which a Leyden jar may be discharged.

EXAMINATIONS FOR THE DEGREE OF M.D. OR M.CH.

October 4, 1866.—*Afternoon.*

MEDICINE.

(*Examiner*—ROBERT D. LYONS, F. & C. K.Q.C.P.I.)

1. What are the symptoms and signs of gangrene of the lungs?
2. What is the differential diagnosis between the syncopal attacks of fatty heart and the seizure of apoplexy?
3. Describe a case of typhoid pneumonia, and state how you would treat the disease.
4. How would you diagnose endocarditis from pericarditis? and which would you regard as the more formidable malady, and why?
5. State the symptoms, diagnosis, and treatment of peritonitis from perforation.
6. How would you diagnose aneurism in the thorax from a cancerous or other tumor?
7. Describe the principal phenomena and treatment of bilious remittent fever.
8. Enumerate the principal forms of nephritis now recognized, and their diagnosis and treatment.
9. Describe a case of rheumatic arthritis, its complications and treatment.
10. Give the diagnosis between incipient pleuritis and pleurodynia, and the treatment of each.
11. Describe the chief phenomena of colica pictonum, and the most approved rational treatment for such a case.
12. What are the symptoms, diagnosis, and treatment of calculus of the kidney?

October 5, 1866.—*Morning.*

ANATOMY.

(Professor CORBETT, M.D.)

1. Describe the temporo-maxillary articulation, its ligaments, and the motions of the lower jaw.
2. Describe the posterior mediastinum, and state the relations of the œsophagus in that region.

(Professor REDFERN, M.D.)

3. Describe the steps of a dissection which will expose the anterior surface

of the scalenus anticus muscle, stating the position of each part in the exact order in which it appears in the dissection.

4. Describe the origin, course, and termination of the subcutaneous veins of the upper and lower limbs.

(Professor CLELAND, M.D.)

5. Describe the course, topographic relations, and branches of the musculo-spiral nerve from its origin down to its division into the radial and posterior interosseous nerves.

6. Describe the appearance, position, structure, and connexions of the membrana tympani.

October 5, 1866.—*Afternoon.*

PHYSIOLOGY.

(Professor CORBETT, M.D.)

1. State the composition of bone, and describe the appearance of a transverse section of the compact tissue of long bone under the microscope.

2. Referring to the rhythmical action of the heart, describe its impulse, the characters and causes of the natural sounds.

(Professor REDFERN, M.D.)

3. Trace the course which is taken by fatty, by albuminous, and by saccharine substances, from the alimentary canal into the blood, and state where and how these substances may be detected in their course.

4. What advantages do we gain by having voluntary control over the muscles of respiration? Under what circumstances may one side of the chest be at rest, whilst the other is moving actively?

(Professor CLELAND, M.D.)

5. State the means by which high and low pitched notes of the voice are produced, and the cause of the range of the female voice being higher pitched than that of the male.

6. Describe the history of the Graafian vesicle from its commencement, and after discharge of the ovum.

October 6, 1866.—*Morning.*

SURGERY.

Examiner, ROBERT M'DONNELL, M.D., F.R.S., F.R.C.S.I.

1. Describe the disease known as "housemaid's knee," and enumerate the modes of treatment suggested for it.

2. A patient labouring under acute gonorrhœa is attacked with retention of urine; what will you do for him?

3. What are the diagnostic symptoms by which a hydrocele of the tunica vaginalis may be distinguished from a scrotal hernia?

4. Suppose that you have to deal with a case of simple fracture of the femur in a young person, and about the middle of the bone, describe how you will treat the case.

5. What are the early symptoms of caries of the spine in the dorsal region? What the treatment?

6. What are the directions given in the Pharmacopœia for making a cathartic and a turpentine enema?

October 6, 1866.—*Afternoon.*

MIDWIFERY.

(*Examiner*, LOMBE ATTHILL, M.D.)

1. What is the ordinary duration of pregnancy in the human female, and how would you calculate the date at which labour would probably take place in any given case?

2. What is the essential difference between accidental and unavoidable hæmorrhage as regards their cause, diagnosis, and management?

3. Describe the symptoms of rupture of the uterus, and give the treatment suitable in such cases.

4. How would you manage a case in which abortion having taken place at the fourteenth week of pregnancy the placenta is retained?

5. A plethoric young woman suffers during the latter weeks of pregnancy from headache, there is constipation of the bowels, and edema of both hands and feet; what would you dread in such a case? and give the treatment you would adopt.

6. The secretion of milk is often excessive on the third or fourth day after delivery, the patient suffering much from over-distention of the breasts and consequent fever; what means would you adopt to relieve her?

October 8, 1866.—*Afternoon.*

MEDICAL JURISPRUDENCE.

(*Examiner*, Dr. W. D. MOORE.)

1. What is the average length of time assigned, under ordinary circumstances, to the cooling of the dead body?

2. How soon after death does cadaveric rigidity usually set in?

3. What are the principal marks whereby monomania may be distinguished from eccentricity?

4. In what does confirmed dementia consist?

5. When does a person attain his legal majority, or become completely of age?

6. How would you recognize and distinguish sulphate and chloride of zinc in solution?

7. What is the smallest dose of powdered nux vomica which has been known to cause death?

8. What is the shortest period in which strychnia has been known to prove fatal?

9. How would you recognize acetate of lead in solution? To what class of poisons does it belong, and what is its fatal dose?

10. What is the smallest dose of aconitia which has been known to produce dangerous symptoms?

CONFIDENTIAL.]

No. 2.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE UNIVERSITY OF DUBLIN.

Visitor:—Dr. LEET.

EXAMINATIONS for Degrees and Licences to practise Medicine and Surgery are held three times during the Academic year, viz. at Michaelmas, Hilary, and Trinity Terms.

The Examinations are conducted by the Professors of the School of Physic, which is under the joint control of the Board of Trinity College and of the President and Fellows of the College of Physicians.

All Students of the School of Physic must be matriculated by the Senior Lecturer of Trinity College, but no such Student is obliged to undergo any preliminary Examination in Arts or to attend any academic duties of the University, unless he desires to obtain a Licence or Degree in Medicine, or a Licence or Degree in Surgery.

The *Degrees* are:—1. Bachelor of Medicine. 2. Doctor of Medicine. 3. Master in Surgery.

The *Licences* are:—1. Licentiate in Medicine. 2. Licentiate in Surgery.

A Candidate for the Degree of Bachelor in Medicine must be a Graduate in Arts, and may obtain the Degree of M.B. at the same Commencement as that at which he receives his Degree of B.A., or at any subsequent Commencement, provided the requisite medical education shall have been completed. The medical education of a Bachelor in Medicine is of four years' duration.

A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the Degree of M.B. for three years, and must perform exercises for the Degree before the Regius Professor of Physic.

The Degree of Master in Surgery can only be obtained by Students who are Bachelors of Arts, and who have completed the professional Curriculum and passed the Examinations required.

The Curriculum extends over a period of four years.

Candidates for the Licences in Medicine or Surgery must be matriculated in Medicine, and must have completed four years in medical studies, and also must have passed an Examination in Arts.

The Medical Course and Examination necessary for the Licence in Medicine is the same as for the Degree of M.B.

The Surgical Course and Examination necessary for the Licence in Surgery is the same as for the Degree of Master in Surgery.

Candidates for Degrees and Licences in Medicine and Surgery are expected to pass two Examinations; the first of which is held at the close of the second year of medical study, and the other after the full Curriculum has been completed.

The Examinations are classed into *Previous* and *Degree* Examinations.

They are carried on both orally and by means of printed papers; the Examinations are open to the public.

The Professors examine on their respective subjects, and always in the presence of other Professors.

The Candidates are examined in class, and the questions are passed round. *Ten vivâ voce* questions are given to every Candidate, and the answers are recorded by marks which accord with the degree of merit assigned to each answer by the Examiners.

The sum total of the marks received determines the comparative standing of the Candidates; but in some instances this rule is not literally followed.

By appointment of the Irish Branch Council I visited a large number of the Examinations for Medical and Surgical Degrees in this University during the past year.

Every facility was afforded me, on the part of the Professors, to witness the Examinations; and my especial thanks are due to Rev. Professor Haughton, the Registrar of the School of Physic, for the information he so frankly communicated upon every point connected with the Examinations. The questions were judiciously selected, and appeared to be well suited to test the Candidates' knowledge; but in consequence of the *vivâ voce* questions being passed round the class the answers did not tell to advantage, and I was unable to form a correct judgment of their value.

In the written Examination, however, where more scope is allowed to the Candidates for displaying their information, the Candidates, in all the manuscripts submitted for my perusal, evidenced scholarship and considerable professional knowledge. The printed papers annexed to this Report will show the character and extent of the questions.

There was an Examination also in Operative Surgery, and in the Diagnosis of Surgical Diseases, for Candidates in Surgery.

About thirty-five per cent. constitutes the minimum number of marks for passing.

It was a loss to have been deprived of the assistance of Mr. Hargrave, who had been deputed to co-operate with me in conducting this Visitation, and who was prevented by indisposition from attending.

In conclusion, I venture to offer the following suggestions,—

1. That no medical or surgical qualification be conferred upon any person who has not graduated in Arts; and that the University should discontinue to grant "Licences" in Medicine and Surgery.

2. That examinations *in class* be abandoned; and that Candidates be examined separately in each subject.

3. That experimental and practical tests be applied in the examination of Candidates.

4. That the standard for the Degrees be fixed higher.

(Signed) CHARLES H. LEET.

EXAMINATION FOR DEGREES IN MEDICINE.

Hilary Term, 1866.

PRACTICE OF MEDICINE.

(Dr. STOKES.)

1. With what diseases is a varicose state of the epigastric, mammary, and intercostal veins, commonly associated?

2. Describe the disease called "sea scurvy." State how far the exclusive use of salted meats is to be taken as its exciting cause.

3. Describe the disease termed "*Petechiæ sine febre.*"

4. Give the treatment of acute and passive Purpura Hæmorrhagica.

5. What are the principal sources of danger in these diseases?

6. How would you proceed to reduce or return hæmorrhoidal tumours?

7. Give the treatment of the affection.

8. Write a form for an anodyne enema used as an opiate suppository.

9. Miasmata are divided into the animal and paludal. Compare their effects on the system.

10. Give the general relation of these miasmata to endemic and epidemic diseases.

(Dr. R. W. SMITH.)

1. Give a description of the disease termed "cancrum oris." Mention its treatment.

2. To what disease is it analogous?

3. Mention the general and local causes of pyæmia.

4. Describe the constitutional symptoms that attend it.

5. Give the situations and peculiar characters of pyæmic abscesses.

6. A limb may be suddenly seized with gangrene while in a perfectly sound condition, where there has been no injury, nor have any of the ordinary causes of gangrene been in operation. To what would you ascribe its occurrence under such circumstances?

7. Describe the appearances of a sore that has been attacked with hospital gangrene.

8. Mention the predisposing causes of this form of gangrene, and state how you would treat it, locally and constitutionally.

9. In what cases would you employ ice to produce local anæsthesia?

10. Contrast the disease termed by Mr. Hamilton "tubercular syphilitic sarcocele" with the ordinary syphilitic disease of the testicle.

MIDWIFERY, &c.

(Dr. Sinclair.)

1. The most reliable signs and symptoms of pregnancy, and the earliest period of gestation at which each becomes available for diagnosis?

2. Describe fully the line of treatment you would adopt, and the rules you would enjoin, in a case of ordinary *accouchement*, from delivery to convalescence.

3. What may give rise to retention of urine—

a. During gestation;
b. During labour;
c. After delivery?

4. Given a case of "cross-birth," with one of the fœtal hands in the vagina, how would you determine the exact position of the child *in utero*?

5. Describe the following cases of shoulder presentation:—

a. In which version could be performed with facility;
b. In which version could be performed, but with difficulty;
c. In which version ought not to be attempted.

6. Describe the mode of performing the operation of evisceration.

7. Causes of abortion—

a. Maternal;
b. Ovuline?

8. Describe the natural progress of the vaccine vesicle on the human subject, from the first appearance to the falling of the crust, stating the day on which each phase is perfected.

9. What modes of treatment may be adopted for dismenorrhœa arising from stricture of the canal of the cervix uteri?

10. What symptoms arising would lead you to order a carminative mixture for a newly-born child? Write a recipe for one.

(Dr. Law.)

1. What is the generally received explanation of the first sound of the heart?

2. How does pathology favour this explanation?

3. What is supposed to be the cause of the second sound of the heart?

4. How does pathology favour this supposition?

5. Under what pathological conditions of the heart is the greatest amount of hypertrophy and dilatation of the organ met with?

6. Under what conditions is concentric hypertrophy met with?

7. What are the contingencies that may occur in a case of phthisis pulmonalis hasten the ordinary fatal termination?

8. What are the points of agreement and difference in the physical signs and constitutional symptoms of a case of a cirrhosis of the lung and phthisis pulmonalis?

9. How many different diseases of the kidney are comprehended under the designation, "Bright's disease"?

10. What is the point in which all agree?

MEDICAL JURISPRUDENCE.

(Dr. Travers.)

1. In the dead body, what circumstances will distinguish between *rigor mortis* and the rigidity produced by idiopathic tetanus, or that of strychnic poisoning?

2. An adult human body being found suspended by a cord encircling the neck, how can it be determined whether death was the result of hanging? or of some other cause?

3. State the symptoms and treatment of poisoning by oxalic acid, or a soluble oxalate, and the mode of detecting such poison in the matters rejected from the stomach, or found in it after death.

4. What are the objections to Marsh's process for the detection of arsenic in suspected liquids?

5. Under what circumstances may a wound of the heart not be immediately fatal?

6. What is the mode in which the *Physostigma venenosum* destroys life? and how will its action be recognisable during life?

7. How can you determine that a red or reddish-brown stain on a white garment, is due to the colouring matter of blood? and, if so, whether that blood has been human?

8. Why is not sufficient evidence that the child had been born alive, supplied by the *docimasia pulmonum*?

9. By what characters will an incised or a punctured wound be shown to have been inflicted on the body during life?

10. Is suicide *necessarily* a proof of insanity? if not, in what cases is it not to be so regarded?

EXAMINATION FOR DEGREES IN SURGERY.

(Dr. Adams.)

1. What are the forms of tumours of the nerves observable?
2. What is meant by the case of subcutaneous nervous tubercle?
3. What is the surgical treatment in these two cases?
4. Mention the names of those writers who have described the different forms of nervous tumours, as well as the subcutaneous nervous tubercle.
5. Describe the ordinary case of prolapsus ani, and say what examination you would institute to discover the cause of the complaint.
6. What do you mean by internal as contrasted with external piles?
7. Name some of the surgical operations and means resorted to to afford the patient relief from piles.
8. As a general rule, which of the surgical operations recommended do you consider as safest and best?
9. Describe a case of indolent carcinoma, or scirrhus, of the female breast; and say what accompanying local symptoms would prevent you recommending amputation of the breast in the case.
10. What forms of ulceration of the tongue may be confounded with the cancerous form? and how would you distinguish one from the other?

SURGICAL ANATOMY.

(Dr. M'Dowel.)

1. Describe the coraco-clavicular ligaments, and mention how they influence the motions of the scapula.
2. Give a description of the thyroid body—its arteries and veins, minute structure, and supposed uses.
3. Assign the length of time during which the epiphyses of the humerus and those of the radius remain united by cartilage only.
4. Describe the operation for securing a wounded glutæal artery outside the pelvis. Point out the difficulties and dangers of the operation, and mention any cases of the operation you may have seen or read of.
5. What irregularities of the femoral artery may affect the success of the operation of tying that artery for the cure of aneurism?
6. The parts divided in tying the femoral artery after Porter's method? What objections have been urged against that operation?
7. Give the anatomical relations of the urinary bladder.
8. The distribution of the facial nerve (seventh pair)?
9. Enumerate the muscles attached to the thyroid cartilage.
10. The course, relations, and distribution of the external poplitæal nerve.

(Dr. R. W. Smith.)

1. Contrast mollities ossium with rickets.
2. Pathology of mollities ossium?
3. Mention the causes of death in cases of caries of the temporal bone.
4. How would you distinguish between separation of the lower epiphysis of the humerus and luxation of both bones of the forearm backwards at the elbow?
5. What is the nature of the displacement when the clavicle is broken external to the trapezoid ligament?
6. Enumerate the methods of treating fistula lacrymalis.
7. What are the differences between phlegmon and phlegmonoid erysipelas?
8. Describe Syme's operation, termed the "perineal section."
9. Give an accurate description of the true Hunterian chancre.
10. Symptoms of mercurial erethismus?

EXAMINATION FOR DEGREES IN MEDICINE.

Trinity Term, 1866.

(Dr. Stokes.)

1. What is the cause which, according to Sir Gilbert Blane, is a greater source of the mortality of troops during war than all other causes, including the sword?
2. What are the conditions which render the system more susceptible to the invasion of the so-called zymotic diseases, and less able to resist their influence?
3. Compare the ordinary effects of animal and marsh miasmata on the animal economy.
4. Enumerate the different forms of disease traceable to vegetable malaria.
5. As regards the efficacy of early treatment, compare the diseases induced by animal miasmata with those resulting from true malaria.
6. Give the signs of the scorbutic diathesis; its exciting causes and treatment; and its influence in medical and surgical affections.
7. What are the comparative influences of dryness or humidity of soil as to the production of malaria?
8. What advice would you give to the public authorities, and what prophylactic measures would you recommend to individuals, when an invasion of cholera is threatened?
9. In the construction of the wards of an hospital there are two important points to be attended to, namely, the number of cubic feet of air for each

patient, and the amount of ventilation. To which of these would you attach the greater importance?

10. How far can a deodorizer be considered a disinfectant? Enumerate the deodorizers and disinfectants in use.

ANATOMY AND PHYSIOLOGY.

(Professor M'Dowel.)

1. Enumerate in their order the parts which the omohyoid muscle lies on.

2. Mention the principal theories which have been held as to the production of animal heat.

3. Describe the course and give the relations of the temporal artery.

4. Enumerate the intrinsic muscles of the larynx, and arrange them according to their actions.

5. Describe the epiglottis, and assign its relations.

6. The composition of the bile?

7. Trace the anterior crural nerve, give its relations, and enumerate its principal branches.

8. Contrast a nerve of the sympathetic and a nerve of the cerebro-spinal system as to their minute structure.

9. Enumerate the structures which maintain the antero posterior and the transverse arch of the foot, respectively.

10. The minute structure of synovial membrane, and the composition of Synovia?

(Dr. Banks.)

1. What are the causes of intestinal occlusion?

2. The symptoms and pathology of leucocythemia?

3. Compare the prodromal fever of small-pox, scarlatina, and measles.

4. What are the symptoms, pathology, and treatment of malignant jaundice?

5. What are the diseases in the course of which cardiac inflammations are likely to occur?

6. What are the symptoms, pathology, and treatment of cerebro-spinal arachnitis?

7. What are the physical signs of cirrhosis of the lung?

8. What are the indications for the operation of thoracentesis in pleuritic effusions?

9. What are the indications for the administration of stimulants in typhus?

10. What is the form of epilepsy in which bromide of potassium has been found useful?

CHEMISTRY.

(Dr. APJOHN.)

1. If the same galvanic current be transmitted successively through water, hydrochloric acid, and a solution of sulphate of sodium, what are the relative quantities of these compounds which will undergo electrolysis?

2. Explain, in the case of a Nairn's machine, how the positive conductor becomes charged; also why, in order to bring the *machine* into action, one or other of its two conductors must be uninsulated.

3. What is the ordinary method of developing chlorine gas, and the reactions which ensue when the gas is conducted into a strong solution of potash?

4. Copper may be converted into a soluble salt by sulphuric or by nitric acids; explain the action of the acid in each of these cases.

5. How is liquor potassæ made? Mention also the impurities usually present in it, the experiments by which they are detected, and the manner of removing them.

6. Mention the composition of the chief ore of antimony, how it is converted into antimonii terchloridi liquor, and how from this latter a pure oxide of antimony may be obtained.

7. Write the formula for urea; mention how it is usually extracted from urine, and the advantage which oxalic acid has over nitric when used in the latter process.

8. Write the formula of valerianic acid; explain how it is made artificially, and converted into valerianate of zinc.

9. Name the leading proteinic compounds, and the percentage of nitrogen occurring in each; state also how the protein of Mulder may be extracted from them; and mention the method suggested by Liebig for showing that they include unoxidized sulphur as a constituent.

10. Write the formula for chloroform; explain how it is made, and how it is deprived of spirit, hydrocarbons, and water.

MATERIA MEDICA.

(Dr. AQUILLA SMITH.)

1. Give the characters of the seed of "Strychnos Nux Vomica." Name the preparations made from the seed, and state the dose of each for an adult.

2. How much lime is held in solution in one fluid ounce of "Liquor Calcis Saccharatus"; and how much in one fluid ounce of "Liquor Calcis"?

3. State the quantity and kind of cinchona bark in one pint of "Tinctura Cinchonæ Compositæ," and in one pint of "Tinctura Cinchonæ Flavæ."

4. Name at least three of the tinctures in the British Pharmacopœia which

become turbid on the addition of water, and the colour of the precipitate in each case.

5. What are the constituents of "Pilula Rhei Composita," and how much rhubarb is in ten grains of the mass?

6. Give the botanical name of the plant, and the part of the plant from which "Resina Podophylli" is prepared. Why is hydrochloric acid used in preparing the resin? State the therapeutic action, dose, and mode of administration of the resin.

7. How much "Tartarated Antimony" is in one fluid ounce of "Vinum Antimoniale"? and how much "Tartarated Iron" in one fluid ounce of "Vinum Ferri"?

8. Give the general characters of the gum-resins, and a description of one of them, with its action, dose, and mode of administration.

9. What preparation of "Catechu Pallidum" is in the Pharmacopœia? Describe the drug, and give the name of the plant from which it is obtained.

10. Write a prescription in Latin for an eight-ounce mixture, containing two vegetable diuretics, and one diuretic salt, with directions for its administration.

(Dr. WRIGHT.)

1. Enumerate the different forms of Inflorescence in which the flowers are sessile on (*a*) an elongated and on (*b*) a shortened or depressed axis.

2. Enumerate some of the more striking modifications of persistent Bracts.

3. Describe the calyx in Delphinium, Helleborus, Anemone, Hyoscyamus, Eschscholtzia, and in Physalis.

4. Describe the flower of Sarothamnus Scoparius.

5. Enumerate the different modes of dehiscence.

6. Describe the different parts of the pericarp in an Achene, Drupe, Pomum, Berry, and Hesperidium.

7. Describe a Strawberry, Raspberry, and Mulberry.

8. Enumerate the different layers of Bark met with in the common Oak.

9. Refer the Plant A on the table to its natural family and genus.

10. Describe the Plant marked B as to its stem, leaves, eflorescence, and flowers.

EXAMINATION FOR DEGREES IN SURGERY.

(Dr. ADAMS.)

1. Mention the precursory constitutional signs of an acute attack of erysipelas.

2. How do the usual phenomena of swelling and redness of the skin in erysipelas differ from the same phenomena in cases of circumscribed phlegmon, as well as in the case of "the diffused phlegmon" of Dupuytren?

3. Give an example of an acute attack of erysipelas, involving the mucous membrane of the mouth, fauces, &c.; the appearance of the tongue when affected; and mention also the surgical treatment you would resort to in such a case, as well as the appliances you would have in readiness to carry out such treatment.

4. Suppose a case of traumatic erysipelas of the head and face, and that on the sixth or seventh day from its commencement the redness had suddenly receded, and that "coma somnolentum" was setting in; what medical treatment would you immediately resort to at this crisis of the case?

5. *Chronic orchitis* sometimes proceeds so far as to cause a partial protrusion of the body of the testis through an ulcerated aperture in the scrotum—opportunities have occurred (both on making *post mortem* examinations, and in cases in which castration has been improperly resorted to) of making a vertical section of such a mass, so as to expose the interior of the tumour; describe the appearances that such a section has been found almost uniformly to present.

6. The diagnosis, prognosis, and surgical treatment of cases of this description?

7. Contrast a case of malignant disease of the testis, with the above-mentioned case of Lipoma, or granular testis.

8. Describe a benign bony cyst, engaging extensively the body and ramus of the inferior maxilla.

9. The usual contents of these benign bony cysts?

10. State the surgical operations you would advise to be resorted to in such cases; and the appliances you would have in readiness.

DESCRIPTIVE AND SURGICAL ANATOMY.

(Professor M'Dowel.)

1. Enumerate the bony connexions of the superior maxilla.

2. Trace the course of the superior maxillary nerve, and enumerate its branches.

3. Trace the course of the formative fibres of the cerebrum from the medulla oblongata.

4. Enumerate the muscles which are attached to the lower jaw, and assign their places of attachment.

5. The course, relations, and distribution of the internal epigastric artery?

6. Give a description of the choroid coat of the eye.

7. Describe the oblique muscles of the eyeball, and assign their functions.

8. Describe the prostatic portion of the urethra, and mention the objects seen within it.

9. Describe the inferior tibio-fibular articulation.

10. Give a description of the parts which lie on the dorsal aspect of the foot.

SURGERY.

(Dr. R. W. Smith.)

1. What evidence is there of the influence of atmospheric causes in producing purulent or Egyptian ophthalmia?
2. State your opinion (and the grounds upon which it rests) as to its contagious nature.
3. Describe its commencement, progress, and terminations.
4. Enumerate the sequelæ of the disease.
5. Give the local and general treatment of it.
6. As regards the mortality of the injury, contrast rupture of the bladder from external violence with gunshot wounds of that viscus.
7. Enumerate the diseases in which castration is justifiable, and describe the steps of the operation.
8. Mention the artery after the ligature of which secondary hæmorrhage is particularly likely to occur, and give the reason.
9. Diagnosis of a wound of an intercostal artery by a broken rib?
10. Brodie's operation for varicose veins.

EXAMINATION FOR DEGREE OF M.B.

Michaelmas Term, 1866.

(Dr. R. W. Smith.)

1. Local and constitutional signs of hernia humoralis?
2. Mention the various modes of treatment.
3. Symptoms of strangulated hernia?
4. Signs of gangrene of the intestine?
5. Mention the modes of treatment you would have recourse to in a case of recent strangulation before proceeding to operate.
6. If, upon laying open the sac, you found the intestine mortified, what would be your line of treatment?
7. What dangers attend abscesses in the parietes of the abdomen?
8. What methods have been recommended for the local treatment of anthrax?
9. Write a prescription for a fermenting poultice.
10. What are the signs of a fracture of the patella? How would you treat this injury?

INSTITUTES OF MEDICINE.

(Professor Law.)

1. What is Prout's classification of alimentary substances?
2. How does an adherent pericardium affect the nutrition of the heart?

3. How does position affect the number of the pulse?

4. How many different renal affections are comprised under the general designation of Morbus Brightii?

5. What is the pathological lesion in *ataxie locomotrice*?

6. What are the arguments that may be adduced to prove that typhus and typhoid fever are essentially different diseases?

7. What are the lesions usually found after death in typhoid fever?

8. Who first described yellow softening of the brain?

9. What explanation did he give of it?

10. What surgical operation proved the correctness of his explanation?

MEDICAL JURISPRUDENCE.

(Dr. Travers.)

1. How are hypostatic stains developed on the body after death, to be distinguished from the results of contusion during life?

2. Enumerate the conditions that might be mistaken for cadaveric rigidity, and the diagnostic characters of each.

3. State the circumstances by which the progress of decomposition in the dead body may be affected, retarded, or accelerated.

4. A dead body having been found immersed in water, from what can you determine whether the death has been by drowning, or by some other cause?

5. Distinguish the coma of inebriation from that of apoplexy, and of concussion of the brain.

6. To what objections is *Reinsch's* process for the detection of an arsenical poison liable? and how are they to be obviated?

7. What forms of poisoning might be confounded with, or mistaken for, malignant (or Asiatic) cholera? and on what would the diagnosis be established?

8. By what characters observed in the anatomical autopsy, will death from exposure to sulphuretted hydrogen, either alone, or with some other noxious gas, and but little diluted with atmospheric air, be recognisable?

9. To what is due the difficulty of determining whether wounds were inflicted during life, or after death?

10. What circumstances would you admit as criteria to distinguish *simulated* from real insanity?

MIDWIFERY, &c.

(Dr. Sinclair.)

1. Fœtal head in the left occipito-cotyloid position at the brim; describe the mechanism of the child's passage through the pelvis.

2. Demonstrate the utility of auscultation in determining the position of the fœtus in utero, at full term.

3. Mention the puerperal causes of death; of the mother and of the child.

4. Œdema gravidarum of the primiparous; its prognostic import, and the treatment for its removal?

5. Mention the least, and the most fatal form of complex labour as regards the mother.

6. Give a short history and describe the operation of symphyseotomy; also state your opinion with respect to its utility.

7. What is meant by metria?

8. Pruritus vulvæ, symptoms, causes, and treatment?

9. Nature, origin, and treatment of cephalhæmatomata?

10. Write the following prescriptions for a child two days old:—

I. A carminative with opium.

II. A purgative.

BOTANY.

(Rev. Dr. Haughton.)

1. Illustrate the following forms of stem: *articulate, nodose, triquetrous, quadrilateral, ribbed.*

2. Describe the law of phyllotaxis in alternate-leaved plants.

3. Describe the *Digitalis purpurea*, referring it to its natural family; and stating its habitat.

4. Describe the officinal method of using the *Digitalis purpurea*, its adulterations, and physiological effects.

5. Describe the natural family *Alismaceæ*, illustrating your description by an account of the *Alisma plantago.*

6. Describe the *Linum catharticum*, giving the characters of its natural family.

7. You are required to distinguish between the *Caprifoliaceæ* and the *Rubiaceæ;* and to divide the latter into the *Stellatæ*, the *Coffeæ*, and the *Cinchoneæ.*

8. Give an account of Forbes' theory of "specific centres," and illustrate it by examples drawn from the Vegetable Kingdom.

9. Draw figures of an *auriculate*, a *perfoliate*, a *connate*, and of a *pinnatipartite* leaf.

10. Draw a diagram showing the horizontal cross section of the leaf-bud, imbricated and quincuncial, of a poplar whose phyllotaxis is two-fifths.

EXAMINATION FOR DEGREE OF MASTER IN SURGERY.

(Dr. Adams.)

1. The symptoms of a stricture of the œsophagus?
2. With what affection might organic stricture of the œsophagus be confounded?
3. State the *post-mortem* appearances of stricture of the œsophagus: and what other organs besides the œsophagus are usually found implicated?
4. Give the symptoms of organic stricture of the rectum.
5. Contrast these symptoms of stricture of the lower part of the rectum with those of a narrowing of the colon where it approaches the rectum.
6. Under what circumstances would you be unwilling to recommend the excision of a scirrhous tumour of the female breast?
7. What varieties of appearances have you noticed in the cutaneous covering of a scirrhous breast?
8. In performing the operation of laryngotomy in the case of an adult what should be the size of a tube to be inserted in the opening made in the larynx?
9. What are the attentions to be paid after the operation of laryngotomy to the condition of the tube introduced?
10. When a morsel of food becomes suddenly arrested at the lowest part of the pharynx or commencement of the œsophagus, explain the cause of the sudden and sometimes fatal dyspnœa which supervenes. Is the cause of the dyspnœa mechanical, or vital?

(Dr. R. W. Smith.)

1. Give a description of Potts' gangrene.
2. Mention the principal forms of mammary abscess.
3. Describe that form which has its seat in the gland itself.
4. What are the peculiarities of *atrophic* cancer of the breast?
5. Mention the various conditions which, if present, would prevent your removal of a cancerous breast.
6. What operations have been proposed in cases of cancer of the tongue?
7. Describe the characters of luxation of the head of the femur upon the pubis.
8. What would be your treatment in a case of mercurial erethismus?
9. What operations are performed in cases of entropion?
10. Signs of what Mr. Hey has termed "internal derangement of the knee-joint"?

DESCRIPTIVE AND SURGICAL ANATOMY.

(Professor M'Dowel.)

1. The relations of the lachrymal sac?
2. Describe the temporal muscle, and mention its relations.
3. Give a description of the temporal arteries and nerves, and mention the several sources from which they arise.
4. The meaning of the term amphiarthrosis? Give the most remarkable examples of it in man.
5. In what situations on the cranium is the application of the trephine inadmissible?
6. Describe the linea alba, and mention the operations which it may be requisite to perform in this region.
7. Describe the progressive stages of ossification of the humerus.
8. Describe, anatomically, the successive steps of the operation of ovariotomy.
9. The relations of the femoral artery in Scarpa's triangle?
10. Describe the method of removal of the eyeball by enucleation.

CONFIDENTIAL.]

No. 3.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS, IRELAND, FOR LICENCE TO PRACTICE SURGERY.

Visitor:—Dr. AQUILLA SMITH.

Tuesday, 13th of November, 1866, I attended a Quarterly Examination for Licence to practise Surgery, held at the Royal College of Surgeons, Ireland.

The Examination was conducted as follows:—

Twelve Candidates presented themselves for examination at 3 P.M.

Four questions written, on separate slips of paper, were handed to each of the Candidates; the same questions being given to each Candidate,—viz., two on Anatomy, one on Physiology, and one on Materia Medica.

The Candidates were allowed one hour to write their answers.

At 4 P.M. four Examiners took their seats at four separate tables, and four of the twelve Candidates were called up for examination.

The Candidate read aloud the question proposed in writing and his answer thereto. The *vivâ voce* Examination then commenced, first in relation to the answer in writing, and it was continued on analogous subjects for exactly fifteen minutes.

The Candidate was passed in succession to the three other Examiners, by each of whom he was examined for exactly fifteen minutes.

When the four Candidates had been examined by the four Examiners, the latter handed in their voting papers to the Senior Examiner. The vote was "Yes" or "No;" and in case there was an equality of votes, the Candidate was passed. No conference between the Examiners took place before the voting papers were handed in.

Four more Candidates were examined, in like manner, between five and six o'clock, and the remaining four between six and seven o'clock.

On Tuesday, the 20th November, 1866, I attended at the second day's examination of the Candidates who were examined a week before. The subjects of examination were Surgery, Practice of Medicine, and Materia Medica; the Examination was conducted in the same order and time as on the first day.

Observations on the Examinations at the Royal College of Surgeons, Ireland, held on the 13th and 20th November, 1866.

It is not in my power to give an opinion respecting the examination of more than one of the four Candidates, who were examined at the same time, at separate tables as far asunder as the size of the room would admit.

I attended to the examination of one Candidate in succession by the four Examiners. The questions were practical and fair tests of professional knowledge, as far as the too limited time of fifteen minutes for each Examiner would permit.

A few of the Licentiates of the College were seated at one end of the room during the examinations; but it was impossible for more than one or two of them, who happened to be near only one of the four examination tables, to hear the examination of more than one Candidate, and that only partially. This arrangement in a great measure renders the publicity of the examinations nominal.

The mode of voting appears to be objectionable, because each Examiner is obliged to give in his vote, "Yes" or "No," written on a slip of paper to which his name is added; and as no conference takes place between the Examiners, a Candidate who may have answered pre-eminently well is not distinguished from a Candidate who barely satisfies his Examiner, or a Candidate, who has failed to answer every question put to him by one Examiner, may be passed by the three other Examiners. In the case of an equality of votes—two "Yes" and two "No"—the Candidate is passed, the Chairman for the time being not having a casting vote.

Chemistry, Materia Medica, and Forensic Medicine are in the Curriculum of the College, but during the two examinations at which I was present I did not hear a single question on Chemistry or Forensic Medicine asked.

The examination in Materia Medica and the Practice of Medicine was conducted by a gentleman who holds only the qualifications of Fellow of the Royal College of Surgeons, Ireland, and Member of the Royal College of Surgeons, England.

I mention this fact because I consider it an anomaly that the Royal College of Surgeons, Ireland, should examine Candidates in Materia Medica and the Practice of Medicine, while the Royal College of Surgeons, England, does not examine its Candidates on these subjects.

I had no opportunity of attending the Preliminary Examinations, not having received any intimation of the time appointed for holding them.

I have written this Report, and the observations thereon, in deference to the recommendation of the General Medical Council (Minutes, vol. iv. p. 291); and I must take this opportunity of stating my conviction, that the mode of inspection instituted by the Council is not likely to accomplish any good, so long as the Council has power only to issue recommendations which have, up to the present time, been disregarded, in many instances, by some of the Licensing Bodies in Schedule (A) to the Medical Act.

20th April, 1867. (Signed) AQUILLA SMITH.

CONFIDENTIAL.]

No. 4.

REPORT IN RELATION TO THE EXAMINATIONS OF THE APOTHECARIES' HALL, IRELAND.

ON the 15th of August, 1865, the Branch Medical Council for Ireland appointed "Dr. Smith and Dr. Apjohn to visit the Examinations at the Apothecaries' Hall."

No Report was presented, or even asked for, at the Meeting of the General Medical Council held in May, 1866.

June 29th, 1866, the Branch Medical Council for Ireland resolved, "That the Members of this Branch Council, selected in August last to visit the Preliminary and Professional Examinations held by the Licensing Bodies in Ireland, be re-appointed." In the month of October following I received a letter, a copy of which is subjoined.

King and Queen's College of Physicians in Ireland.
Dublin, 12th October, 1866.

DEAR SIR,

I am directed to forward, for your information, the annexed copy of a Resolution passed by the College at its Meeting on the 8th inst.

I have the honour to be, dear Sir,
Your obedient Servant,
(Signed) LOMBE ATTHILL, M.D.,
Fellow and Registrar.

"*Resolved*—That the College cannot give its sanction to its Representative visiting and reporting upon Examinations conducted by the Board of Governors of the Apothecaries' Hall of Ireland, inasmuch as (without referring to other grounds of objection) such Visitation might be construed into an admission that the College admitted the legality of the function which the Board of Apothecaries' Hall has assumed, of adding to their Examination in Pharmacy an Examination in the Science and Practice of Medicine, which the College is of opinion is beyond the functions of the Apothecaries' Hall of Ireland."

I have only to add that I did not visit any of the Preliminary or Professional Examinations held at the Apothecaries' Hall, Ireland.

(Signed) AQUILLA SMITH.

20th April, 1867.

CONFIDENTIAL.]

No. 5.

REPORT ON THE VISITATION OF EXAMINATIONS AT THE KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND.

56, *Upper Mount Street, Dublin, April 20th*, 1867.

MY DEAR STEELE,

In reply to your letter of the 4th ultimo, I attended an Examination held at the King and Queen's College of Physicians on June 26th, 1866, for granting their Licence to practise Medicine, and one for their Diploma in Midwifery.

You will please submit the following Report to the Irish Branch Council of the General Council of Medical Education and Registration.

Believe me, yours sincerely,

(Signed) WILLIAM HARGRAVE.

Dr. STEELE, Registrar,
Irish Branch Council,
35, Dawson Street.

The Court consisted of the following members :—

The President, Dr. Beattie, with the Censors, Drs. H. Kennedy, Moore, Guinness, and Belcher, and the Registrar, Dr. Athill.

The Candidate for the Licence to practise Medicine was examined in the following subjects :—Diphtheria ; symptoms of confirmed Phthisis, with the treatment ; Strychnine ; Yellow Fever and Cholera.

The Candidate was a practitioner of some years' standing, satisfactorily proving his practical knowledge of his profession.

Licence granted.

MIDWIFERY.

This Candidate was examined by the President, with Drs. Guinness and Athill.

The subjects of the Examination were :—The symptoms of Pregnancy, Fœtal Heart, Placental Soufflet ; complex Labours ; classification of diseases of Uterine Tumours, and their treatment.

The Diploma granted.

Observations :—The two Examinations were characterized by clearness, precision, and practically testing each Candidate's knowledge of his profession.

The Examination was oral ; no written questions ; voting not by numbers, but simply "Yes" or "No."

Each Examination was of one hour's duration.

(Signed) WILLIAM HARGRAVE.