

Testimonials regarding Dr D. B. Reid's qualifications as a lecturer on chemistry, and as a teacher of practical chemistry.

Contributors

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TESTIMONIALS

REGARDING

DR D. B. REID'S QUALIFICATIONS

AS A

LECTURER ON CHEMISTRY,

AND AS A

TEACHER OF PRACTICAL CHEMISTRY.

TESTIMONIALS
DR. D. H. RIND'S QUALIFICATIONS
LECTURER ON CHEMISTRY
TEACHER OF PRACTICAL CHEMISTRY

R14638

TO THE RIGHT HONOURABLE
THE LORD PROVOST, MAGISTRATES AND OTHER MEM-
BERS OF THE TOWN COUNCIL OF EDINBURGH, PA-
TRONS OF THE UNIVERSITY.

MY LORD AND GENTLEMEN,

EDINBURGH,
March 12. 1833.

IN submitting to you the following Testimonials, I have confined myself strictly to the evidence of individuals who have had ample opportunities of judging of every thing on which they have delivered an opinion.

The Regulations of the Royal College of Surgeons, of the Army and Navy Boards, and the Report of the Royal Commissioners, all founded on the most ample evidence, having settled the importance of Practical Chemistry as a Branch of Medical Education, I have not considered it necessary to extend evidence on this point.

To those who may not be yet aware of its importance to our Arts and Manufactures, the evidence I have adduced, of Gentlemen well qualified from their experience in these departments to judge of its value, will be satisfactory.

I have the honour to be,

MY LORD AND GENTLEMEN,

Most respectfully,

Your very obedient Servant,

D. B. REID.

THE LAND COMMISSIONERS AND OTHERS
OF THE LAND OFFICE OF THE
GOVERNMENT OF THE NETHERLANDS

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the application of the Land Commission for the purchase of the land situated at the corner of the street and the canal, and in reply to inform you that the same has been referred to the competent authorities for their consideration. I am, Sir, very respectfully,
Yours obedient servant,
J. van der Meer,
Secretary of the Land Commission.

I am, Sir, very respectfully,
Yours obedient servant,
J. van der Meer,
Secretary of the Land Commission.

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TESTIMONIALS.

I.

*From JAMES LESLIE, Esq. Civil Engineer, Nephew to the
late Professor Leslie.*

MY LORD,

DUNDEE HARBOUR,

15th February 1833.

HAVING been favoured with a perusal of Dr REID's Memorial to the Patrons of the University of Edinburgh, recommending the establishment of a Professorship of Practical Chemistry, and being deeply impressed with the importance of a thorough knowledge of that science to all persons engaged in the Arts, I take the liberty of addressing your Lordship on the subject.

The failure of some unassisted attempts to perform chemical experiments, immediately after having attended a course of lectures on Chemistry, long ago convinced me of the impossibility of attaining a perfect or available knowledge of the science, without some experience in its practical details; and there cannot be the smallest doubt, that this experience may be most effectually acquired, and with a great saving of time and expense, by the attendance on a practical course.

There, an opportunity is not only afforded of observing minutely the various operations in all their stages, and of procuring information on the matters incidental to the subject, but the students are required individually to take an active share in the performance of the experiments, so as to become perfectly familiar with all the manipulations, and to acquire a degree of expertness which will enable them afterwards to operate without assistance, and to make useful applications of the knowledge which they possess.

Trusting that the Patrons will see the great importance of this study, in relation not only to the Arts, but also to the common occurrences of life, and be pleased to afford more ample means for its successful cultivation, by the institution of an independent Professorship, it gives me much pleasure to be able to bear testimony to the high attainments of Dr REID, which would most eminently fit him for discharging the duties of the Chair.

I have derived much gratification and instruction from his lectures; in particular, from those delivered in the Leith Mechanics' Institution, of which body I was at that time a Director; and I have invariably had occasion to admire his clear and masterly way of elucidating his subject, and his beautiful and accurate performance of the experiments. The arrangements of the laboratory at the College shew also the skill and business-like habits of an experienced operator.

Although I have presumed thus to offer my opinion of Dr REID's merits, I feel that it will be of much greater importance for me to bear testimony to the sentiments entertained of him by my late uncle, Professor LESLIE, as unfortunately he has left no written testimonial of a date subsequent to the commencement of their greatest intimacy.

It is consistent with my knowledge that, for the last five years, my uncle had been in the practice of frequently availing himself of Dr REID's advice and assistance in many de-

partments of science ; and I have often heard him express the very highest opinion of his profound theoretical knowledge, his judgment and ability as a lecturer, and his thorough experience as a practical chemist.

In our last conversation, he mentioned his earnest wish that Dr REID were placed in some situation where his zeal and eminent services in the cause of science might meet with some adequate reward ; and I humbly conceive that such a reward could be most appropriately bestowed, and at the same time be made conducive to the interests of the University, by appointing him to a Professorship of Practical Chemistry.

I have the honour to be,

MY LORD,

Your faithful and most obedient servant,

JAMES LESLIE.

The Right Hon. JOHN LEARMONTH,
Lord Provost of Edinburgh.

II.

*From GEORGE SINCLAIR *, Esq. M. P., &c.*

Lady OLIVIA SPARROW'S, BRAMPTON PARK,
N. HUNTINGDON, 23d January 1833.

MY DEAR SIR,

I AM sorry that, in the hurry of business, I omitted to write to you before I left Edinburgh. Allow me, whilst visiting a friend, to supply the omission, and to express how happy I should feel as a friend to Science, and a wellwisher to the University of Edinburgh, to see you established as a permanent and independent Professor of Practical Chemistry. I consider Dr HOPE to be quite unrivalled as a teacher, and that both his lectures and experiments approach as near perfection, as any human compositions and arrangements can do. But any tyro in chemical science must feel the necessity of superadding actual manipulation to theoretical instruction; and I am decidedly of opinion, from my own experience and observation as one of your early pupils, that you are pre-eminently qualified to superintend that department of scientific tuition. Your own enthusiastic attachment to Chemistry,—your anxiety to keep pace with the progress of discovery,—the complete acquaintance which you possess with its details, as well as with its principles,—the perspicuity of your explanations,—the patience and good temper with which you accommodate them to the degree of knowledge or intelligence possessed by the humblest and least capable of your pupils,—the neatness with which you perform every experiment,—and the care and success with which you train up others to similar efforts, have long rendered me anxious to see you occupy some situation commensurate with your talents, your knowledge, and your zeal. Wishing you, on these grounds, as well as from personal regard, all possible success, I ever remain,

My DEAR SIR,

Very faithfully yours,

GEORGE SINCLAIR.

* MR SINCLAIR attended Dr REID'S class in the High School Yards, and also on a subsequent occasion.

III.

*From GEORGE JOSEPH BELL, Esq. Advocate, Professor
of the Law of Scotland in the University of Edinburgh,
F. R. S. E. &c.*

68. QUEEN STREET, January 1833.

MY DEAR SIR,

I FEAR that any expression of the high opinion which I entertain of your talents and power as a Teacher of Chemistry can be of little value, so entirely have I been occupied with my own proper subject of Jurisprudence; and so little time have I devoted to those more pleasing and instructive studies, to the improvement of which you have so largely contributed.

To yourself, however, I have great pleasure in saying, that when two years ago I attended your Course of popular Lectures, I was very much struck with the clearness of your explanations, the neatness and perfectly just adaptation of your experiments to the illustration of the principles of Chemistry, and the judicious and practical consequences which you so lucidly deduced as the necessary operation and effect of the principles in their application to arts and manufactures.

I was delighted with the order in which you disposed the subject, so as to unite the most elementary instruction with important practical results—and felt how useful the lessons of such a teacher must be to those who engage in chemical inquiries as the business of their lives.

The Chemistry of the Arts, and the practical uses and application of this science in Agriculture, and in every branch of the manufactures so necessary to the existence of this commercial country, cannot fail to suggest themselves to every one who has those interests at heart, as deserving the most

serious consideration of the public. And, I am persuaded that, in addressing yourself to the Patrons of the University on the subject of a Professorship of this branch of the science, you will find the greatest encouragement in their good sense and knowledge of the national importance of what you propose.

To medical men this method of study is indispensable, and nothing can be more just than the views entertained by the Royal Commissioners on this subject, which you will find stated in their Report.

They have not been equally alive to the uses and importance of it in relation to Arts and Manufactures. But in this respect the want of their testimony will be amply supplied by that which every man is ready to give who looks with interest to the various branches of industry, which are the sources of our national wealth.

The only doubt which seems to be entertained in this matter (or which can at all be interesting to you) is that which the Royal Commissioners have suggested—in proposing that this department shall be conducted by Private Teachers, placed under the subordination or control of the *Senatus Academicus*. But this will never do. If the study be important, it should be placed at once boldly on the most respectable footing. And no man who ever saw the operation of such machinery, can think of giving his consent to the placing of one teacher under another. Embarrassments, restraints, loss of all enthusiasm, death to the zealous spirit of teaching, are the inevitable consequences. A sense of degradation on the one hand, a perpetual temptation to interfere on the other, lead to dissensions which never ought to be suffered, far less encouraged and promoted in a system of teaching. In the pride, enthusiasm, and independence of a separate Professorship, is to be found the best secret of successful teaching.

I trust that no such narrow conception can be entertained,

as that the practical manipulation necessary in the plan of teaching, which you have so successfully followed, serves to degrade from the proper rank of professorial dignity, this most useful course. In no method of study are the principles so strongly brought into question and discussion as in a course of Experimental Inquiry; and on no occasion is it so necessary to the successful prosecution of the inquiry, that a student should have the mind of a master in the science to direct and guide him,—the ready aid of one who can explain to him the true principle. Then it is that the value of that power of clear exposition which I have so often been delighted to see you display, is fully felt and appreciated; and no one can have attended to the course and progress of instruction in any science, without being aware how much practice, and how strict a logic, is necessary to discover exactly where the source of a student's embarrassments lies, and how perfect a mastery of the science is necessary to resolve the doubts (often the most unexpected), from which such embarrassments proceed, and by the clearing of which alone the learner is enabled to proceed in his course.

I am, for these reasons, most heartily glad to see this proposal likely to be brought forward, and have no doubt whatever, that the Patrons of the University will resolve to establish, on a proper footing, an Institution which will do so much service to the science, and tend so materially to promote its most useful applications. Excuse this very long epistle, and

Believe me,

Yours faithfully,

GEORGE JOS. BELL.

To Dr D. B. REID, &c.

IV.

*From BINDON BLOOD, Esq. of Cranaher, in the County of
Clare, M. R. I. A., F. R. & A. S. S. E.*

MY LORD,

EDINBURGH, 22. QUEEN STREET,
January 31. 1833.

FEELING much interest in the promotion of Chemistry, perhaps the most general in application and utility of the whole circle of Sciences, I was gratified, a few days since, by hearing of a probability that the Patrons of the University of Edinburgh would shortly establish a Professorship of *Practical* Chemistry. That such an establishment would be of vast advantage, requires but slight acquaintance with Physical Science for conviction; and, if determined on, it is matter for great congratulation that you can have so efficient and talented a person as Dr D. B. REID to undertake its laborious duties.

Of Dr REID I have had some experience as an instructor in Practical Chemistry, and consider him one of the most assiduous, intelligent, and highly qualified Teachers of science I ever heard. To knowledge of Theoretic Chemistry, in which he is inferior to none, he unites a facility of conveying his ideas, a patience with the numberless mistakes which tyros will necessarily commit, and a quality of leading those under his guidance to accuracy and neatness of manipulation, which are quite essential in the teacher of practical science.

As to Theoretical Chemistry, the Chair in your University is as ably and efficiently filled as possible, by the present justly distinguished and highly valued Professor, Dr HOPE; but the Theory of Chemistry, without that practice which *Practical* Courses alone can lead to, will never make a Chemist, or enable those in different practical situations to apply

their knowledge beneficially. In proof of this, I may mention the instance of a gentleman who attended Dr REID's Practical Courses of Chemistry along with me last winter, and had before made the Theory of Chemistry an object of attainment; he had spent some years in one of the great Mining Districts of South America, where there was only one person capable of assaying the ores, in consequence of which much delay was given to the works, and sometimes large transportations of ores made without the relative value being at all ascertained, to the manifest loss and injury of the proprietors. He was so struck with the deficiency, that he came to this country for the purpose of becoming better acquainted with the subject, and expert at the manipulations of assaying, with the view, on his return, of practising it himself, and also of leading others to do so, which probably cupidity prevented being done by the only person previously capable. The gentleman I allude to became an expert assayist in a few weeks under Dr REID's instructions.

You will pardon, my Lord, my thus troubling you, as Head of the Patrons of the University, with a few of my ideas on this subject, which I consider of prime importance to that learned seminary.

I have the honour to be,

MY LORD,

Your faithful and obedient servant,

BINDON BLOOD.

To the Right Honourable

The LORD PROVOST of Edinburgh, &c.

V.

From JAMES HAY, Esq. Managing Partner of the Edinburgh Roperie and Sail-cloth Company at Leith, and of the Bleaching and Flax-spinning Mills at Malleny, Secretary to the Leith Mechanics' Institution.

DEAR SIR,

LEITH, 30th January 1833.

I WILLINGLY comply with your request, and have taken the earliest opportunity of sending you this letter.

I attended your Lectures at the Leith Mechanics' Institution during three sessions, and was gratified by your clear and luminous demonstrations of the general doctrines of Chemistry, by your perspicuity of arrangement, your manual dexterity, and great success in experimenting, your earnestness and minuteness of explanation, your very happy manner of communicating instruction, and particularly your numerous applications of chemical principles to the useful arts, and to the conducting of those processes which materially minister to the wants and comforts of man. From my official situation as Secretary, I had probably greater personal intercourse with the Subscribers and Students than any other individual connected with the Institution, and uniformly found the members bearing willing testimony to the benefit they derived from your Lectures, from your aptly blending theory with the practice followed in their several professions.

In the year 1830, I attended your practical class in the University. I have been since an occasional visitor, and have seen with pleasure, under your fostering care, and by your unaided and indefatigable exertions, the class of Practical Chemistry, from numbering only a few individuals, attain its

present eminence, and now able to reckon an annual number of upwards of 200 students.

Conceiving that the more general diffusion of Practical Chemistry would prove extremely beneficial to the useful arts, I have observed with satisfaction the great success of the Class Text-Book, your valuable work on Practical Chemistry. Individually, I have derived great benefit from its instructions, and have pleasure in stating, that, on lately visiting some extensive manufacturing establishments, I found the "Elements" much consulted and prized by the foremen operatives who conducted the chemical department of the manufactories. This gratified me for two reasons, first, that the workmen had selected so able and trust-worthy a guide; and, secondly, as shewing that the Elements were contributing to the downfall of the guess or rule-of-chance mode of working, and to the raising on its ruins an improved system of manufacture based on sound chemical principles.

From the importance now so justly attached to Practical Chemistry, and the increasing desire for its acquirement, I humbly think that a Professorship of Practical Chemistry has become necessary in the Edinburgh University. If such a Chair should be established, I sincerely hope you may be the successful candidate, because, so far as I am qualified to judge, I conceive that you are eminently calculated to discharge its duties with honour to yourself, and with advantage to the Students and the University.

I am,

DEAR SIR,

Yours truly,

JAMES HAY.

Dr D. B. REID.

VI.

*From the Rev. THOMAS CHALMERS, D. D., Professor of
Divinity in the University of Edinburgh, &c.*

MY DEAR SIR,

EDINBURGH, Jan. 26. 1833.

I REGRET to understand that the University is to lose the benefit of your peculiar and most interesting services. You with great delicacy refrained from entering on any exposition of the cause which may have led to this unfortunate result, and I therefore am not competent to judge on the merits of the question,—a topic, indeed, which, unless called upon in the way of duty or of business, I should feel unwilling to entertain. But I feel it no more than an act of justice to express my obligation for the pleasure and instruction which I received during my attendance, two or three years ago, on your course of popular lectures, where, besides the utmost expertness and address in all the manipulations of Chemistry, you evinced, and more particularly in your lucid exposition of the Atomic Theory, both how thoroughly you had comprehended, and how successfully you could communicate, the principles of the Science.

I ever am, My DEAR SIR,

Yours most respectfully,

THOMAS CHALMERS.

To Dr DAVID B. REID.

VII.

From Sir THOMAS DICK LAUDER, Bart. F.R.S.E. Member of the Geological Society of London, Member of the British Association for the Promotion of Science, Vice-President of the Society of Arts, &c. &c.

MY DEAR SIR,

THE GRANGE HOUSE,
EDINBURGH, 6th March 1833.

IN compliance with your request, I have very great pleasure in bearing my humble testimony to your high qualifications as a man of science, from which the intimate intercourse which I have had the good fortune to enjoy with you, has enabled me to derive so much instruction and gratification.

In my official capacity of Vice-President of the Society of Arts, I have had ample opportunity of knowing the deep interest which you take in the advancement of science; and, in common with the other members of that body, I have to thank you for the great benefit arising from your frequent and remarkably perspicuous illustrations, not only of those valuable communications which came directly from yourself, but also of those subjects which were brought under our notice by other individuals.

Having had occasion to deplore the want of a Class of Experimental Chemistry, at the time when I was studying that science, I have been, and still am, extremely desirous of supplying my own deficiency in this respect, by a regular course of attendance in that which is so ably taught by you. But, though my other avocations have hitherto prevented me from so gratifying myself, I have yet seen enough of your admir-

able arrangements, and of your management of its whole operations, to satisfy me that you are supereminently gifted with that coolness of head—that readiness and activity of mind—and with those very peculiar powers of conduct and of control—which are absolutely necessary to secure the useful occupation of every person present, and of every moment of time, in a Class where there are so many pupils simultaneously engaged in experiments, many of which are necessarily of an extremely hazardous description.

Trusting that I may yet have an opportunity of profiting by a full course of instructions given by you in a Class of Experimental Chemistry, established in the University of Edinburgh,

I ever am,

MY DEAR SIR,

Yours most sincerely,

THO^S. DICK LAUDER.

Dr D. B. REID.

VIII.

*From JOHN BAIRD, Esq. Managing Partner of the Shotts
Iron-Works.*

SHOTTS IRON WORKS, BY WHITBURN,

MY DEAR SIR,

9th February 1833.

YOUR memorial to the Right Honourable the Lord Provost and Gentlemen of the Council, as Patrons of the University of Edinburgh, I have read with much satisfaction, and wish you success with all my heart, knowing no man so deserving, and so well qualified, as you are for the situation contemplated. The great exertions you have made, and are still making, in your valuable class to render Chemistry practically useful, must in time meet that encouragement such unwearied perseverance so highly merits. To every thinking disinterested man, who knows the value of Chemistry, it must be a matter of astonishment that permanent provision for a Practical Chemistry Class has not been made in the University long ere now, by the appointment of a regular Professor. Unless this is done, it cannot be supposed that a properly qualified professional man will devote his whole time and attention to it, so absolutely necessary to the success of so arduous an undertaking. I shall be truly happy to hear that the Patrons have agreed to appoint a Professor; that you are the man of their choice; and that you shall be placed on an equally independent footing with the other Professors. So highly do I appreciate the great advantage to be derived from your instructions, that, even at my advanced time of life, I would have much pleasure in attending your valuable lectures and experiments, with which I have been occasionally so much delighted and instructed, for a regular course or two,

had I an opportunity of doing so; but the important trust committed to my care here, puts that completely out of my power.

When in Edinburgh last week, I had the honour of introducing to you my much valued and highly respected friend General WILSON, from Russia, to whom I related the whole circumstances respecting your present situation, gave him a copy of your Memorial, and asked him to turn the matter over in his mind, and write you a few lines expressive of his sentiments on the subject, which I have no doubt he has done. As a scientific man, the General is held in the highest estimation, not only in Russia, but wherever he is known: he has had many honours conferred upon him, for his services, by the Russian Emperors, and holds several high scientific situations under the Russian Government. As he has travelled much all over Europe, and is a man of great discernment, no one can be more capable of judging of the importance of Practical Chemistry being taught, and made a permanent Professorship, in all Universities. To me, the General, after the opportunities he had of conversing with you, and examining all your arrangements for teaching Practical Chemistry, expressed his high admiration of your chemical knowledge, and how well you merited being placed in the situation contemplated.

I am, with much regard,

Yours most sincerely,

JOHN BAIRD.

Dr D. B. REID.

IX.

From Lieutenant-General A. WILSON, of the Imperial Russian Service.

DEAR SIR,

EDINBURGH, 8th February 1833.

I WAS much gratified by having had an opportunity of attending your introductory lecture, and of examining the arrangement of your furnaces and apparatus in the class which you now occupy in the University buildings as Lecturer on Practical Chemistry. At the same time, I was much disappointed to learn, that your situation is not official, and that even the propriety of your continuing as Lecturer in the College is under consideration.

The utility of lectures accompanied with practical operations, explanatory of the application of Chemistry to the purposes of Manufactures, Agriculture, and Domestic Economy in general, has been long recognised. In most European countries, wherever Professors in this department of Chemistry have not been attached to the Universities as part of the establishment, separate institutions have been founded for Technological studies, with Professorships for Practical Chemistry.

Whether these separate institutions are likely or not to answer the benevolent intentions of their founders and promoters, is a question not necessary to discuss on the present occasion; but it appears to me, that a Practical Course of Chemistry must prove highly useful in a University constituted like that of this city, where no small proportion of the students is composed of individuals who do not attend with the view of dedicating themselves to the learned professions, but whose studies are merely preparatory to the various avocations to which their stations in society may lead them.

As far as my observation has extended, I have remarked

that considerable difficulty has been everywhere experienced, in finding persons fit to occupy the situation of Professors of Practical Chemistry, combining theoretical knowledge with the experience of practical operations, and having had an opportunity of observing manufacturing processes to such an extent, and in such variety, as to enable them to fulfil the duties of their office in a satisfactory manner. Your experience, attested by so many individuals fully capable of judging of your acquirements in chemical science and manipulations, put your capacity for the office for which you are a candidate out of all question.

Being almost unknown in this city, I have no influence here, and my opinion can be of no weight in this affair; but sincerely wishing that the University may in every respect continue to merit the high reputation it has always held, and that the field of its usefulness may be farther extended, I would fain hope that so many of those who have witnessed your meritorious labours, will exert their influence in your behalf, so as to induce the Patrons of the University to grant your requests a favourable reception. I would even wish to persuade myself, that the highly talented Professor who has so long and so well taught the history and theory of Chemistry, and who, it is to be hoped, will yet long continue to benefit the University by his labours, may be induced to favour you with his support, for your mutual aid will tend to the benefit of science, as the division of labour, even in this case, is likely to produce important results.

With best wishes and perfect esteem,

I remain,

DEAR SIR,

Your obedient Servant,

A. WILSON.

Dr D. B. REID.

X.

From JAMES SIMPSON, Esq. Advocate.

MY DEAR SIR,

NORTHUMBERLAND STREET,
11th February 1833.

IT must delight every friend to science, to the arts of use and ornament in this manufacturing country, and to the comfort, safety, power and resource of man, to learn that the Patrons of the University of Edinburgh have now their attention called to that inestimable improvement, a permanent class of Practical Chemistry within its walls; I say within, for otherwise it will establish itself without, by its own demonstrated intrinsic excellence.

Great as has been your success hitherto, greater yet awaits you, and a crowd of students must follow you, if you are unfortunately permitted to leave our College, carrying with you your valuable and extensive apparatus, and, far more valuable, your enviable power of putting it to use, and teaching others to do so. No one who knows and appreciates the system of your practical laboratory, can doubt that you have created the Chair which you are naturally and laudably ambitious to fill, and that a Professorship, a Professor, and an apparatus, all of first-rate excellence, may be said to be already in efficient operation, wanting only the fiat of the Patrons to extend their efficiency, by giving status, independence, and dignity to a new school so well entitled to these popular advantages.

I have attended more than one Chemical lecture, but in none have I seen so extensive, minute, accurate, and ready a store of chemical knowledge, so adroit and almost infallible as manipulation, or so clear, attractive, and fluent an elocution, and that without the aid of a note—as in yourself.

Cæteris paribus, the Projector or material improver of a great public good, ought, in justice and right feeling, to have its permanent direction, when that becomes an object of public patronage; but if the absolute balance shall incline to your side, as I feel assured it will, in the most extensive competition, I should not chuse to be the person who should glide in and reap the mature fruit of a vineyard which had been planted as well as cultivated by yourself. Wishing you that success which you so well merit, and which I cannot permit myself to doubt your suit will obtain,

I am very faithfully yours,

JAMES SIMPSON.

Dr D. B. REID.

XI.

From JOHN MACFIE, Esq. Master of the Merchant Company, Edinburgh, Proprietor of the Edinburgh Sugar-Works, formerly one of the Directors of the Leith Mechanics' Institution, &c.

EDINBURGH SUGARHOUSE, February 1. 1833.

DEAR SIR,

I AM happy to hear the proposal for founding a Professorship of *Practical Chemistry* in our University,—a branch of instruction which begins to assume, in public estimation, that place which it deserves to possess, from its indispensable utility to the Medical Practitioner, and direct tendency to improve the Arts and Manufactures of our Country.

But what affords me greatest pleasure, is to learn that you are offering your valuable services to occupy the Chair. I say not this from late acquaintance, but the experience of many years, during which I have only increased my favour-

able opinion of your admirable qualifications. These, however, are far too well known by those whose judgment alone is of value, to allow of any encomium from me.

Both in the Leith Mechanics' Institution, while a Director for some years, and in your own Practical Class in the College, I have derived great satisfaction from witnessing your Chemical Experiments, performed with such success and expert manipulation, and accompanied by clear and eloquent remarks. I highly admire, what may be thought of scarcely less consequence, your zeal in extending your own chemical knowledge, and in seeing Theory reduced to Practice in the Arts, by visiting the various manufactories and works in different parts of the country. Among others, you visited, in company with your late distinguished friend Sir JOHN LESLIE, our Sugar-refinery in Leith, to see some improved apparatus, then recently fitted up, the process of boiling *in vacuo*, and the other chemical improvements in our operations. I cannot conclude without expressing also my high opinion of that energy and decision which I have always found you display,—and which, when combined, as in your case they are, with careful habits of investigation, are so requisite to the successful pursuit of Science, and so proper for one who, being the instructor of students, will be the *model* they will strive to imitate in the prosecution of their studies.

I wish you all success in the desirable object you have in view, and trust that the Patrons will prove the wisdom which regulates their discharge of duty, by making the Edinburgh University the first to possess a Chair for Practical Chemistry,—in which case I cannot doubt on whom their choice will fall.

I am,

Dear SIR,

Yours truly,

JOHN MACFIE.

Dr D. B. REID.

XII.

From Colonel MACINNES, of the Bengal Army.

MY DEAR SIR,

HERIOT ROW,
Wednesday, Jan. 30. 1833.

I AM glad to hear that it is in contemplation to establish a Professorship of Practical Chemistry in the University of Edinburgh, both because I think that department requires the undivided attention of one teacher, and because, I presume, no one will compete with you for the nomination to the new Chair.

Chemistry is now regarded as an essential branch of education for several professions, need I except that to which I myself belong? But without the power of experimenting, and some skill in manipulation, which are best attained in the laboratory, mere theoretical lectures,—even although delivered with the perspicuity that belongs to Dr HOPE's Course,—are but imperfectly understood, and result in little or no practical use.

On the new department, you, I imagine, will be admitted to possess a peculiarly strong claim, in the judgment of persons more competent to appreciate your attainments, than I can presume to be. There is, however, one point on which, after ample experience, I may be allowed to speak without any diffidence, I mean your power of engaging the attention and interest of your students, together with the never-failing alacrity with which you receive and solve their difficulties. This important qualification you possess in a pre-eminent degree; and not less, in consideration of your past severe labours in the University, than to prevent the loss which the Chemical department would sustain by your eventual separation from it, do I sincerely desire that the Patrons may secure the continuance of your valuable services on a permanent and independent footing, such as they deserve.

Let me take this opportunity to offer my cordial thanks for the indulgence to which I have been myself so often indebted,

in the course of my chemical pursuits; and believe me to remain,
Yours very truly,

J. MACINNES.

Dr D. B. REID.

P. S.—Having glanced at the importance of some chemical knowledge in my own profession, most military men will agree with me, I think, in regarding it as at the least an acquirement likely to prove occasionally very *interesting*, in the course of a professional life. But, in the case of an Indian officer, this will be more obviously true, when it is considered that, from the commencement of his career, he is constantly liable to be thrown on his own resources for much on which the health and comfort of his men materially depend, while placed for months together in the command of out-posts, at a distance from the Regimental Head Quarters. Not to insist on his being in such circumstances, necessarily his own doctor, and that of his detachment, I may, out of a number of supposeable cases, shewing the value of experimental chemistry, instance that of a doubt arising respecting the purity of water at his post, or while traversing an unfrequented route, and the satisfaction it must afford to one so situated, to feel qualified to settle his suspicions conclusively, by an immediate reference to unerring tests.

XIII.

*From JAMES FARNIE, Esq., Managing Partner of the
Burntisland Whale-Fishing Company.*

DEAR SIR,

BURNTISLAND, 1st February 1833.

I SEND you herewith a printed copy of the late Sir JOHN LESLIE's Report to Lord MACKENZIE, Ordinary, in the law question which presently depends against the

Company, at the instance of a variety of parties, upon an allegation that our operations, conducted on a most extensive scale, in the reducing of Whale Blubber into Oil upon a new and scientific principle, which had occurred a considerable time ago to myself, should, without trial, be held as a nuisance, and put down as such. And I, as well as my partners, have the greatest possible pleasure in bearing our united testimony to the truth of the eminent reporter's statement, that he, in the uninviting task of watching the successive steps of four experimental trials of our process, in the month of March last, availed himself, as he expresses, "of the very able assistance of my ingenious scientific friend Dr D. BOSWELL REID, who pursued all the details of the operation with that skill and unwearied assiduity by which he is so justly distinguished."—From Sir JOHN LESLIE's Report, dated 14th May 1832.

I would be wanting in that sense of justice which I feel due to you, and the progress of science generally, did I stop short here. Having, in the progress of my invention, derived many valuable practical suggestions which have contributed to the triumphant success of the experiments, as illustrated in at least forty trials since, I am fully satisfied that, if you attain the distinction you now aim at, commercial gentlemen will feel it their interest to cultivate a share of that practical experience in Chemistry which, in my opinion, you are so well qualified to give. With best wishes for your success in this and all your pursuits,

I am, DEAR SIR,

Yours sincerely,

JAMES FARNIE.

To Dr D. B. REID.

XIV.

From W. C. TREVELYAN, Esq. of Wallington, Northumberland, F.R.S.E., F.A.S.E. &c.

MONYMUSK, ABERDEEN,

February 1. 1833.

MY DEAR SIR,

IT is with much pleasure that I have heard of your endeavours to call the attention of the Patrons of the University of Edinburgh to the importance of the Institution of a Professorship of Practical Chemistry there; and when I consider the immense value to a great number of the members of the community of a correct practical knowledge of a science so intimately connected with the prosperity of so many arts and sciences which flourish in this country, I believe that I cannot wish better for the cause of those arts and sciences, than by wishing, which I sincerely do, that you (of whose knowledge, and of whose excellent method of imparting that knowledge, and of directing the studies and labours of those who have been so fortunate as to be your pupils, I have had practical demonstration,) may be the first Professor of Practical Chemistry in the University of Edinburgh.

Your Tables and Introduction to Practical Chemistry, I believe to be amongst the most valuable aids to students in this interesting and important science which have for some time appeared.

Believe me,

MY DEAR SIR,

With every best wish,

Yours very sincerely,

W. C. TREVELYAN.

To Dr D. B. REID.

XIV.

From ROBERT BALD, Esq. Mining Engineer, F.R.S.E., &c.

MY DEAR SIR,

EDINBURGH, 14th February 1833,
65. YORK PLACE.

I HAVE read with much pleasure your paper addressed to the Lord Provost and Magistrates of this city, regarding the establishment of a Chair and Professorship in the University for Practical Chemistry.

The great utility of such a Chair in the present state of science, connected with the very rapid advances now making in Great Britain and its colonies in arts and manufactures, must be most obvious to every one who has, in any degree, turned his mind to the subject.

The success of your labours in teaching Practical Chemistry is acknowledged by the public; and those who have attended your Class bear testimony to the lively interest your pupils take in attending to, and going through the various intricate chemical processes which each of them takes charge of, and also to the fixed attention they pay to the very clear and distinct explanations you give regarding the chemical actions and combinations which take place while each process is going forward.

It is not for me to speak of your profound knowledge as a chemist in theory and practice—this will be taken notice of by men who can, from an intimate knowledge of the science, do you all manner of justice.

I can, however, from my profession as a mining engineer, bear ample testimony to the great utility of practical chemistry being taught, and I now mention with pleasure two very important results which have come under my notice.

There was found in sinking the pits in the Glasgow coal-field several bands or beds of black shale, as it was termed. Of this no particular notice was taken, and this shale had,

for centuries, been thrown away amongst the rubbish of the pit heaps. The discovery of the value and utility of this shale was reserved for one of the most distinguished ironmasters of Scotland, DAVID MUSHET, Esq. who, to the knowledge of an experienced ironmaster, added that of a practical chemist in an eminent degree. He was struck with the appearance and weight of the black shale, and made a few sample experiments with it. The result was, that he found it to be a bituminous ironstone of great value. It was immediately, and continues to be, extensively and very profitably used in the iron-furnaces of the Glasgow districts, being most abundant there; and such is its value in making iron of superior quality, that the Carron Company cart it from the Airdrie district to their works. The same kind of ironstone has been lately discovered in Clackmannanshire, and is daily used at the Devon Ironworks. It has this advantage, that it contains in general as much bituminous matter as serves to calcine the stone, which, when removed from the hearth, appears like melted masses of iron.

My friend, the late WILLIAM DIXON, Esq. of the Calder Ironworks, who was so eminent as a mining engineer and ironmaster, very emphatically said to me, that, for this discovery, Mr MUSHET deserved a *crown of gold*.

The next very striking example is also the discovery of a practical chemist, my friend ANTHONY HILL, Esq. of the Plymouth Ironworks, South Wales, a most scientific ironmaster.

In the process of making bar-iron, there is produced a great quantity of black slag or glass from the forges. This was accumulated in the course of years into immense heaps or hills at every ironwork as useless. Mr HILL, from his attention to practical chemistry, found it contained about 30 per cent. of iron. The consequence has been, that the immense heaps of forge-slag are now in request for the furnaces; and this slag forms part of every charge put in the furnace, which produces a great saving in the process of iron-making.

Besides these very prominent and lucrative discoveries of

Practical Chemists, I could mention more of minor importance, such as Fire and Pottery Clays, Fine Siliceous Sand for the making of Glass, &c. which are daily occurring to the Miner and Practical Chemist, and which are of great value both in a private and national point of view.

I have to add, in conclusion, that I always recommend the young men who are studying Mining under me, to attend your course, as several of them have done, very much to their satisfaction, by adding to their usefulness; it being well known, that, in sinking pits, and driving mines of investigation, a great variety of rock strata are passed through, in which minerals are found very useful in our manufactures. And I have no doubt that the mining engineers, who are Practical Chemists, will continue to discover strata applicable to many useful purposes, particularly for the potteries.

The Theory of Chemistry is most ably and successfully taught by Dr HOPE, and I feel gratified that I can say that I was one of his pupils. All the young men placed under my care have studied under him with great advantage to themselves; but I hesitate not to say, that I conceive that, without a practical course of Chemistry such as yours, they would be greatly deficient in that point which renders their researches in the Mines of Great Britain particularly useful.

From the importance of this department of Chemical Science, I hope and trust the Lord Provost and Magistrates will, with a liberality which will do them honour, and our country essential service, establish a Chair for Practical Chemistry in the University, and that, proceeding upon the principles of merit alone, they will honour you with the first appointment.

With hearty wishes for you health and prosperity, I remain with great regard,

My DEAR SIR,

Yours truly,

ROBERT BALD.

To Dr D. REID, 37. Nicolson Street.

XVI.

*From THOMAS GALLOWAY, Esq. Professor of Mathematics
in the Royal Military College, Sandhurst.*

ROYAL MILITARY COLLEGE,

Feb. 10. 1833.

MY DEAR SIR,

IT has been with great pleasure I have heard from you of the proposal to establish a class for Practical Chemistry in the University of Edinburgh. The beneficial results that may be anticipated from such an arrangement are so obvious, that it would be altogether unnecessary, I should imagine, to attempt to point them out to any body of educated men. Whatever tends to facilitate the acquisition of a practical knowledge of a science so important to the Medical Student, and so necessary in conducting the operations of the great manufacturing establishments of the country, and even in many of the most useful arts of life, cannot fail to be regarded as an object of great national interest.

With regard to your own qualifications as a Professor of Chemical Science, it may be thought presumptuous in me to say any thing. They are amply attested by others who have had better opportunities of appreciating them, and who are more competent judges. But as I have repeatedly had the pleasure of hearing you lecture, I may be permitted to state, that, from the uncommon perspicuity, elegance, and methodical arrangement of your illustrations, I have been led to entertain the opinion that you possess, in a very eminent degree, not only great talents for the communication of scientific knowledge, but that intimate acquaintance with your subject, without which there can be no efficient instruction.

I remain ever,

MY DEAR SIR,

Yours very faithfully,

THOMAS GALLOWAY.

Dr D. B. REID.

XVII.

From Mr J. C. BIRKINSHAW, Resident Engineer at the Leicester and Swannington Railway.

MY DEAR SIR,

RAILWAY OFFICE,
LEICESTER, 19th February 1833.

I FEEL great pleasure in complying with your request, and regret my not being able to write to you sooner.

I am conscious that the expression of the high sense I have always entertained of your abilities can be of little consequence, yet my experience, as one of your earliest pupils in the study of Practical Chemistry, entitles me to bear testimony to the clearness of your demonstrations of the general principles of the science, the careful adaptation of your explanations to the progress of your pupil, the vividness of your illustrations, your unwearied endeavours to communicate to your pupils the same skilfulness of manipulation which you so successfully employ in your own experiments, and your liberality in affording every facility to the peculiar views of your professional pupils. In my own profession, Chemistry is of the greatest utility, if not absolutely indispensable; but a mere acquaintance with the theory of the science, without some knowledge of the practice of chemical manipulation, is, comparatively, of little service.

I trust that an object so desirable as the institution of a Professorship of Practical Chemistry in the University of Edinburgh, will meet with that support it certainly merits. In the event of the establishment of such a Professorship, I feel assured that there will be no candidate whose qualifications can be successfully put in competition with your own.

Wishing you every success.

I am, MY DEAR SIR,

Yours very truly,

J. C. BIRKINSHAW.

Dr D. B. REID, Edinburgh.

XVIII.

From the Rev. E. B. RAMSAY, of St John's Chapel, Edinburgh, F. R. S. E., &c.

MY DEAR SIR,

EDINBURGH, 11. AINSLIE PLACE,
February 15. 1833.

YOU may recollect that two years ago I was one of your auditors, during a course of popular lectures, which you delivered in the Assembly Rooms, and that it fell to my lot at the conclusion of these lectures, to present to you, in the name of your very large and most respectable class, a piece of plate, in token of their approbation and gratification. I followed you with great attention through the whole course, and I cannot express how highly I thought of the dexterity with which you exhibited the leading facts of Chemical Science, and of the clearness and address with which you illustrated and explained abstruse principles. I should imagine that my previous slight knowledge of the doctrine of the atomic theory, enables me to speak with certainty of your success as a *teacher*, and of the remarkable power you possess of unfolding the most difficult points in your interesting science. I heartily wish you success in all your undertakings—there can be no doubt of the great advantage attending practical classes of Chemistry, and as little of your qualifications to conduct them with success.

I am, DEAR SIR,

Yours most truly and sincerely,

E. B. RAMSAY.

Dr D. B. REID.

XIX.

*From CHARLES COWAN, Esq. Proprietor of the Valleyfield
Paper Mills, by Penicuik.*

MY DEAR SIR,

VALLEYFIELD MILLS.
12th February 1833.

I REJOICE to learn that there is a probability of the institution of a Professorship of Practical Chemistry in the University of Edinburgh, because I feel convinced, that such an appointment is much required, and that it will materially promote the prosperity of the arts and manufactures of this country, by inviting the attendance of numbers of those engaged in these pursuits to this most interesting branch of science.

The arrangements of your room, your method of communicating and of impressing information upon your pupils, and your unwearied superintendence of their various manipulations, appear to me to be so perfect, that I earnestly desire that you may speedily be placed in a sphere of still more commanding usefulness than the one you have hitherto so ably filled. With my sincere wishes for your success in this object, and for your happiness through life,

Believe me,

DEAR SIR,

Your's respectfully,

CHAS. COWAN.

To Dr D. B. REID, Edinburgh.

XX.

From the Rev. J. WILLIAMS, Rector of the Edinburgh Academy.

THIS is to certify, That I have attended a popular Course of Lectures delivered by Dr DAVID BOSWELL REID, and that I have attended him in his Class of Practical Chemistry; that I was particularly struck with his mode of instruction, with the clearness and distinctness with which both the Principles and Practice were explained; and that I conscientiously can state, that I never listened to any teacher more capable of communicating his own knowledge to others, and that I judge him highly qualified to fill any Chair in any University connected with his own department, with honour to himself, advantage to his pupils, and satisfaction to his patrons.

J. WILLIAMS,
Rector of the Edinburgh Academy.

22d Feb. 1833.

XXI.

From THOMAS BUCHANAN, Esq. Superintendant of the Monkland Canal Navigation.

GLASGOW, 25. BLYTHSWOOD SQUARE,
23d February 1833.

MY DEAR SIR,

I UNDERSTAND that, in the event of a Professorship of Practical Chemistry being established in the Edinburgh University, it is your intention to become a candidate for the

Chair. Should this be the case, I need not say you have my warmest wishes for your success; and I feel assured that the College, in enrolling your name amongst its Professors, would make a most valuable acquisition.

When the immense importance of this branch of education—with which the improvement of arts and manufactures in this country is so intimately connected—is considered, it really seems surprising that it should have been allowed to continue so long in comparative neglect; but I am happy to find that Edinburgh is now about to give the example of placing it in that rank to which it is so well entitled.

Having, during the last twenty-five years, enjoyed the advantage of attending the Prelections, and occasionally the Laboratories, of several very eminent Chemists, I may be permitted to state, that in none of them have I found a method so well calculated for imparting a practical knowledge of this interesting science, or one by which its principles were so beautifully explained and illustrated, as your own. Indeed, while I had the pleasure of being your pupil, I scarcely knew whether to admire most, the excellent arrangement by which the minds as well as the hands of every student present were kept in constant exercise; or your clear, masterly, and most satisfactory manner of communicating instruction, which, while it evinced an enthusiastic love for, and a complete acquaintance with your subject, left nothing unexplained, and was eminently calculated to produce a lasting impression.

Believe me to be, with great regard,

MY DEAR SIR,

Yours very truly,

THO. BUCHANAN.

XXII.

*From JOHN GAIRDNER, Esq. M. D., lately President of the
Royal College of Surgeons.*

18. HILL STREET,
8th February 1833.

I HAVE long known Dr DAVID BOSWELL REID. I am also well acquainted with his published works, and have repeatedly visited his classes of Practical Chemistry; and I can confidently certify, that he is a most accomplished Chemist, a very skilful and successful Experimentalist, and an excellent Teacher,—that his Classes of Practical Chemistry have been largely attended,—that his pupils are thoroughly instructed in that very extended and rapidly progressive science,—and that he has therefore given every proof which could be desired of his fitness for undertaking the office of a Teacher of Chemistry, and especially of *Practical Chemistry*.

Of the great importance of the latter branch in relation to Medical Education, no doubt can possibly be entertained among those who are qualified to form a judgment; and while I willingly bear testimony to Dr REID's very high qualifications and success in Teaching, I beg to add, that if the Honourable the Patrons of the University shall resolve to institute a separate Chair for this department of Chemical Instruction, I do not hold myself precluded from doing justice to the character of others who may be disposed to prefer claims to the situation.

JOHN GAIRDNER, M. D.

XXIII.

From GEORGE COMBE, Esq.

25. NORTHUMBERLAND STREET,

9th February 1833.

MY DEAR SIR,

I AM deeply sensible of my own inability to do justice to your merits ; but, in compliance with your request, I certify, with great pleasure, that I attended your popular lectures on Chemistry in winter 1832, and that you appeared to me to possess an extensive knowledge of the principles, combined with great expertness in the practice, of that Science. Your ideas were remarkably clear and definite, and you communicated them with admirable facility and effect. The clearness and vivacity of intellect, and the power of vigorous and long continued application which you possess, seem to me to qualify you, in an eminent degree, for discharging the duties of Professor of Practical Chemistry ; and if you shall obtain that appointment, I have every confidence that you will do honour to the University, credit to yourself, and prove highly useful to the rising generation of Chemical students. I remain,

MY DEAR SIR,

Yours most faithfully,

GEORGE COMBE.

TO DR DAVID ROSWELL REID.

XXIV.

*From Mr JOHN CUNNINGHAM, Architect, Public Works,
City Chambers.*

MY DEAR SIR,

CITY CHAMBERS, PUBLIC WORKS OFFICE,
EDINBURGH, 29th January 1833.

I FEEL the greatest pleasure in complying with your request, to give my opinion regarding the importance of a knowledge of Practical Chemistry to persons of my profession.

I consider it quite impossible for any man to prosecute the profession of an architect, either with satisfaction to his employer or to himself, without having a pretty general acquaintance with Practical Chemistry; for it not only enables him to make a proper selection of the various materials which enter into the composition of a building, but also to judge more accurately of the effect of situation, judicious arrangement of apartments, best means of ventilating, heating, &c. These details, and a great many more which it is needless to mention, are embraced in that important department of science which you have so successfully cultivated; and I have no doubt but that in a short time, when society in general come to be better informed on natural science, such labours as yours will be duly appreciated.—With regard to your abilities to perform the duties of the situation to which you aspire, others better qualified than I am, will doubtless amply testify; but I may be permitted to add, that when I had the pleasure of attending your Practical Class in the College last year, your assiduous attention and unwearied industry, together with the clear and forcible manner in which you explained and illustrated the great variety of experiments brought under notice, arrested the attention and elicited the admiration of all your students. Above all, your polite and obliging manner, when information was wanted, gained you the esteem and confidence of your numerous class.

I am afraid these expressions may be thought to be dictated by an over-zeal for your success on the present occasion, but I consider them only a bare act of justice to your talents and worth.

Trusting that the Patrons will see the utility to the public of a Chair of Practical Chemistry being instituted in the University of Edinburgh, and hoping that you may be the successful candidate for that situation, I am,

MY DEAR SIR,

Yours faithfully,

JOHN CUNNINGHAM.

To D. B. REID, M.D. &c.

XXV.

From Messrs BAILEY & Co., Proprietors of the Mid-Lothian Flint-Glass Works, Portobello.*

MY LORD,

MID-LOTHIAN GLASS WORKS.

HAVING been informed that the institution of a Professorship of Practical Chemistry is under the consideration of the Town-Council of Edinburgh, as Patrons of the University, we take the liberty of expressing to your Lord-

* Dr REID is glad to have this opportunity of publicly acknowledging the very handsome manner in which Messrs BAILEY and Company, for a number of years, opened their extensive works to his Practical Classes, though, on each occasion, a very great interruption to the business of the establishment, and allowed them to see their processes in all their various stages, the steam-engine attached to the works, and all the apparatus and machinery connected with it.

The workmen also having been directed to stop the operations they were then engaged in, and make all the more important varieties of chemical appartaus, as well as many of the more beautiful and useful productions of such a manufactory, so constantly used in daily life, added much to the interest of these visits, while it also shewed the capabilities of the material, and the great order and perfection of all the arrangements in the establishment.

ship our strong conviction of the necessity of such an appointment, inasmuch as it will have a most important influence on the arts and manufactures of this commercial country. It is now admitted on all hands, that, on the progress of improvement in these branches, depends in a great measure the prosperity of Great Britain; nor is any science better calculated than Chemistry to develope new sources of improvement. As Manufacturers, therefore, in the immediate vicinity of the Metropolis of Scotland, and feeling a deep interest in its prosperity, we cannot refrain from representing to your Lordship, that we are satisfied, were a Public School of Practical Chemistry instituted, it would prove invaluable to a numerous body of students, who would attend the University chiefly to derive the advantage which this class will afford.

Understanding that Dr D. B. REID will be a candidate for the new Chair, we feel pleasure in being able to recommend him with confidence, as a gentleman who, in our opinion, is well calculated to fill it with assiduity and ability. As a Practical Chemist we have known him for a number of years, and in our department, he has proved himself abundantly proficient in knowledge. During the last six years we have had various visits from him, accompanied by numerous classes of students, his object being to explain to them the chemical properties of the material of which glass is composed, and to shew them the process of manufacturing it. On different occasions Dr REID was accompanied on the visits alluded to by Sir JOHN LESLIE, Sir THOMAS DICK LAUDER, and other distinguished individuals, who expressed themselves much pleased with the manner in which he conveyed his instruction. We are,

YOUR LORDSHIP'S

Most obedient servants,

BAILEY & CO.

To the Right Hon.

The LORD PROVOST of the City of Edinburgh.

XXVI.

*From JOHN WOOD, Esq. Advocate, of the Sessional School,
Edinburgh.*

51. GREAT KING STREET,
11th February 1833.

MY DEAR SIR,

SINCE you ask my opinion regarding your qualifications for teaching, I feel myself called upon to give what I should have undoubtedly deemed it presumption to offer. Both in the School of Arts, and in the Popular Course of Lectures which I attended with much pleasure, and I hope with advantage, your very perspicuous mode of elucidating your subject, gave me very high satisfaction. My own previous want of acquaintance with that subject, while it utterly disqualifies me from giving any opinion as to your attainments in this highly useful department of science and of the arts, enables me more highly to appreciate, and more strongly to attest, your powers of communication. I think it right to add, that my opinion regarding you was strongly confirmed by the accounts of your Popular Lectures which I received from three very young persons, possessing previously no greater advantage than what the Sessional School could afford, whom you had the kindness to present with tickets to that very interesting course.

I remain,

MY DEAR SIR,

Your's very truly,

JOHN WOOD.

Dr DAVID BOSWELL REID.

XXVII.

*From THOMAS ASTLEY, Esq. Proprietor of the Magnesia
Chemical Works, Bonnington.*

MY DEAR SIR,

EDINBURGH, *Feb. 9. 1833.*

I AM much interested to hear of the probability there is of Practical Chemistry being made now a subject of general attention, by the establishment of a distinct Professorship in the University. The great importance of a practical knowledge of Chemistry in the Arts and Manufactures is every day becoming more apparent.

To those engaging in any branch of chemical manufacture, or whose object it is to qualify themselves for superintending a manufacturing establishment, a thorough practical knowledge, which can only be acquired in the Laboratory, has become quite indispensable, from the methodical and scientific manner in which these establishments are now conducted. As a Candidate for the new Chair, should the necessity for it be acknowledged, I wish you every success; and from the long experience you have had, your excellent practical knowledge, and not least, from the admirable clearness and precision with which you impart your information to others, I am certain that you could not fail to render the Practical Course of increased utility and advantage to the students, and highly creditable to the University. I may add, that it is now upwards of ten years since you had the entire superintendence of the operative part of the Chemical Manufactory carried on by my father in this neighbourhood, and I well remember the pleasure and advantage I derived at that time from witnessing the numerous experiments conducted by you in the Laboratory connected with the works.

I have also very frequently heard my father express himself in the highest terms of approbation at the unwearied attention which you devoted to the interests of his business. With sincere regards and best wishes, I am,

DEAR SIR,

Yours very truly,

THOMAS ASTLEY.

XXVIII.

From NEIL ARNOTT, Esq. M. D., Fellow of the Royal College of Physicians, London, Author of the Elements of Physics, Inventor of the Hydrostatic Bed, &c. &c.

BEDFORD SQUARE, LONDON,
12th February 1833.

MY DEAR SIR,

As my experience is every day showing me how imperfectly young men learn, and how soon they forget, their Chemistry, when they have not had considerable practical familiarity with it, it will give me pleasure to hear that the Patrons of the Edinburgh University have deemed it right to appoint a Professorship of Practical Chemistry; and, if they do, it is my belief that they will rarely have the opportunity of choosing a person so peculiarly fitted for the undertaking as yourself. Besides the proof of your perfect mastery of the subject afforded by your very useful publications, the occasions which I have had of conversing with you on scientific subjects generally, and the testimony of so many others who have spoken to me of your happy manner of publicly communicating the knowledge which you possess, and of your success in awakening a zealous attention among your students, leave in my mind no doubt that your success and utility as a Professor will be great. I remain,

MY DEAR SIR,

Yours faithfully,

N. ARNOTT.

XXIX.

*From GEORGE GOODLET, Esq. Proprietor of the London,
Leith, and Edinburgh Steam-Mills.*

MY DEAR SIR,

LEITH, February 6. 1833.

I WILLINGLY acknowledge my obligations to you for the many judicious hints, freely communicated to me, when erecting the London, Leith, and Edinburgh Steam-Mills and Baths, and also for the subsequent advantageous suggestions for the conducting of the different branches of manufacture carried on in these works,

I occasionally attended your Lectures in Leith, and your Practical Course in the University, and feel gratified in confessing the benefit derived from your instructions.

I am of opinion that the establishment of a Professorship of Practical Chemistry in the Edinburgh University, would tend to the more general diffusion of the principles and practice of Chemical Science, and also materially benefit the arts and manufactures of this country.

I am, my dear Sir,

Yours sincerely,

GEORGE GOODLET.

To Dr D. B. REID.

XXX.

*From the Rev. EDWARD CRAIG, St James's Chapel,
Edinburgh.*

MY DEAR SIR,

GREAT KING STREET,
23d February 1833.

I AM glad to hear that there is some prospect of instituting a Professorship of Practical Chemistry in this University, for I have had practical demonstration of its value. In all my endeavours to attain a knowledge of Chemistry, I ever felt that the want of a laboratory was to me, and must be to most men, an insuperable barrier to the attainment of any thing like a specific and useful acquaintance with the subject. As soon, therefore, as I heard that your class held out the advantage of a complete apparatus, and the privilege of working under your direction, I willingly became a pupil; and speedily learned that, under your masterly guidance, the attainment of Chemical knowledge by actual manipulation was both deeply interesting and easy. Your working system held up to palpable perception the principles of the science, while it taught, at the same time, the selection and the right and safe use of apparatus. To see the experiment as it should be, coming to its result under one's own hand; and to have the benefit of an instant and kind explanation of every seemingly new phenomenon or discrepancy, this is the true road to attainment. And I must say, that during my attendance on your instructions, I found both older men, like myself, to whom the world has lost its novelty, and youths just entering on life, become, under the stimulus of your talented direction, equally ardent and enthusiastic in this study.

I believe, my Dear Sir, that such means of instruction only can effectually initiate the student in the mysteries of

this beautiful science ; and that such practical knowledge is an essential part of the education which every gentleman and professional man ought to receive. The knowledge acquired by merely listening, is comparatively of little use in after years ; but the impress of a practical course of study is indelible. It is not theory ; it is the conflict, and the labour, and the experience of real life.

If such are the results to which I have been led by your teaching, I think I shall not be transgressing the limits of a due regard to your feelings, when I state that I consider you pre-eminently adapted to fill the projected Chair. Soundness of theoretic knowledge, ready application of principles, lucidness of style in explanation, unwearying assiduity and impartial attention, and unvarying good humour and gentlemanly feeling, marked your whole course. The Patrons of the University cannot but value such qualifications united in one candidate for their favour.

I must not omit to notice, though in some respects a subordinate matter, that your instructions in the use of the blow-pipe, and in the application of it to the preparation of glass tube apparatus, are a very valuable part of a Practical Course. They will enable any student, carrying out to a foreign country a few glass tubes of different *calibre*, to pursue Experimental Chemistry under almost any circumstances of privation ; and I doubt not but that they will ultimately redound to your credit, in the practical discoveries of your pupils in different parts of the world.

I am, MY DEAR SIR,

Yours truly,

EDWARD CRAIG.

Dr D. B. REID.

XXXI.

From J. JOHNSON, Esq., late of the Royal Artillery.

DEAR SIR,

33, BUCCLEUGH PLACE,
February 13. 1833.

As one of the pupils attending the course of Practical Chemistry superintended by you during last Summer Session, I feel much pleasure in bearing testimony to the ability you displayed in simplifying by your scientific arrangements and mode of explanation by Diagrams, many otherwise complicated processes, by which you excited among the members of your class a zeal in the pursuit of experimental inquiry which may lead to many useful results.

I have now to express the high sense I entertain of the personal advantage I have received from an attendance on your course, particularly from your exposition of the Atomic Theory, in guiding the student in the practice of Chemistry, and illustrating the processes in which they were engaged, your instructions in the use of the Blowpipe, Tube Apparatus, &c., and your Analytical Examinations, all of which tend to give a facility of manipulation and promptness of resource, which must be duly appreciated by those engaged in chemical investigations.

I have also to return my best thanks for the obliging manner in which, amidst multiplied engagements, you were always ready to give information, and point out the best methods of pursuing experimental Chemistry in private; and in offering my warmest wishes for your success in a private or public capacity, in either of which I feel assured you will advance the interests of the science to which you have devoted yourself. I remain,

DEAR SIR,

With much respect,
truly yours,

JOHN JOHNSON.

To Dr D. B. REID, &c.

XXXII.

From Mr J. WALLACE, Teacher of Mathematics, Edinburgh.

MY DEAR SIR,

EDINBURGH, Feb. 9. 1833.

I REJOICE to learn that there is a probability of a Chair being established in the University of Edinburgh for a Professorship of Practical Chemistry. Should this proposition be carried into effect, I can assure you that it would afford me much pleasure to see you placed in a situation which your talents and acquirements so well qualify you to occupy. If my testimony in your favour be of any service in this matter, you are well entitled to the full benefit of it. I recollect well that, when you attended my classes several years ago, I formed a very high opinion of your talents; and the ardour and unwearied perseverance which you then displayed in pursuing the studies of Mathematics and Physics, gave a sure pledge that you would distinguish yourself still more in the profession to which you were devoted.

I may here state, that I have often heard my lamented friend, the late Sir JOHN LESLIE, speak in the highest possible terms of your "promising talents and solid acquirements;" and he has frequently pointed out, as a very important qualification in a lecturer, that you possessed a rare facility in explaining the subjects of your lecture. I know also that he looked forward to see you placed in the highest rank in your profession.

I am,

MY DEAR SIR,

Yours very truly,

J. WALLACE.

XXXIII.

*From WILLIAM NEWBIGGING, Esq. Fellow of the Royal
College of Surgeons, F.R.S.E. &c. &c.*

EDINBURGH, 18. ST ANDREW'S SQUARE,
12th February 1833.

I HAVE had the pleasure of Dr REID's acquaintance for several years, and known him as an individual eminent for knowledge of Chemical Science. From the opportunities which I have had through the attendance of my sons on his Course of Practical Chemistry, and otherwise, of forming an estimate of his abilities as a teacher of that department, I can have no hesitation in stating that of these I entertain the highest opinion. In his Lectures, some of which I have had the pleasure of hearing, Dr REID appears to me to display, besides a perfect knowledge of his subject, a clearness in his explanations, and facility in the expression of his views, accompanied by a success in the performance of his experiments, eminently calculated to enhance the value of his instructions. These qualifications, requisite in a teacher of any branch of science, are particularly so in that to which Dr REID has peculiarly devoted himself; and, looking to the great importance of Practical Chemistry, both in a medical point of view, and in regard to its intimate connection with the improvements in the Arts and Manufactures of the country, I consider it fortunate that one so able to do so with success should have applied himself so assiduously to its cultivation.

WILLIAM NEWBIGGING.

XXXIV.

From Dr CANTOR.

MY DEAR SIR,

EDINBURGH, February 9. 1833.

I AM much concerned to perceive, from your letter, that you are about to retire from the situation you hold in the University as the Conductor of the Practical Chemistry

Class. The surprising progress which this branch of Science has made within the last few years, its growing importance, not only to the accomplished Physician and well educated Surgeon, but to every scientific and literary man; and, above all, its intimate connexion with Agriculture, the Arts, and Manufactures, and thereby exercising a direct influence on the prosperity of the country, must ere long cause it to become a branch of general education. This, then, being admitted, it must be obvious to any unprejudiced mind, that a Chair of Practical Chemistry would be productive of great benefit, not only to the University, but to the community at large. The Patrons will also see the necessity of providing for it, in such a way as to make it worth the while for men of talent to apply for it; so much the more, as, from the very nature of the science, it can only be taught to a limited number of Students at a time, and the Professor would therefore be obliged to devote to it more time, and incur greater expense, than the teacher of any other science in the University.

In respect to your qualifications for the Chair of Practical Chemistry, should such a one be created, the annual increase of your Pupils, the well-earned reputation you have acquired in your public Lectures, and the excellency of your published Works, will probably have more weight with the Patrons than the testimonials of private individuals. If, however, I be allowed to add my humble testimony to those you will not fail to obtain from distinguished scientific characters, I hope I may be permitted to state, that, having attended your Class, I derived from it great pleasure and instruction, and was as much delighted with the neatness and accuracy of your experiments and the philosophical spirit you brought to bear on the subject, as I was struck with your happy talent of communicating knowledge,—a quality most essential and important in a public teacher. With every reasonable hope for your success, I remain,

MY DEAR SIR,

Yours most sincerely,

L. CANTOR, Ph. Dr.

XXXV.

From JOHN CAY, Esq. Advocate.

DEAR SIR,

11. HERIOT ROW,
EDINBURGH, 7th February 1833.

I HAVE perused your remarks addressed to the Lord Provost and Magistrates, relative to the establishment of a Chair in the University for Practical Chemistry.

I do not presume to express any opinion as to the expediency of such a measure, a question upon which, I observe, persons far more highly qualified to judge than I can pretend to be have already delivered their sentiments. I will venture to say, however, that should such a Chair be instituted, no one can be better qualified to fill it than yourself. If I thought that a profound knowledge of Chemical Science were an indispensable qualification for forming an opinion on this point, I should not have ventured to give my testimony in your favour. But as I have for some years back had opportunities of witnessing your clearness and facility in explanation, your great command of apparatus, and the brilliancy and beauty of your illustrations, points upon which, I conceive, any one who is anxious to acquire information may without presumption judge, I may, and willingly do state, that I never attended any Lecturer who possessed those qualifications in a higher degree, or who afforded more instruction and gratification to his audience, than yourself, in your popular Courses of Lectures. I may also state, that, from some occasional opportunities I have had of witnessing your mode of conducting the Practical Courses, I am assured that the Students who attended them had the means of acquiring a very intimate knowledge, not only of the manipulations, but of the Science itself.

I remain, my dear Sir,

Yours most truly,

JOHN CAY.

To Dr D. B. REID.

XXXVI.

*From JAMES PILLANS, Esq. Professor of Humanity in the
University of Edinburgh, F.R.S.E. &c.*

COLLEGE OF EDINBURGH, 14th February 1833.

MY DEAR SIR,

NOT feeling myself competent, at this moment, to enter in-
to all the bearings of the question you propose for the consi-
deration of the Patrons, I hope you will excuse me if, in
complying with your request, I confine myself to the more
agreeable duty of expressing the lively recollection I have of
your distinguished merits, both as a pupil and a teacher of
mine;—of the ability and persevering industry in classical
studies which secured you a place among the head boys of the
Rector's Class in the High School here;—and of the clear ex-
position, and dexterous manipulation, which made the Course
of Lectures on Chemistry, which I had the pleasure of at-
tending some years ago, so delightful to a numerous audience,
as well as to,

MY DEAR SIR,

Your faithful and obedient Servant,

J. PILLANS.

XXXVII.

*From DAVID MACLAGAN, Esq. M. D., formerly President
of the Royal College of Surgeons, &c.*

MY DEAR SIR,

129. GEORGE STREET, Feb. 12. 1833.

I HAVE long been convinced of the importance and usefulness of Practical Chemistry as a branch of general education, and of its peculiar applicability in the instruction of those engaged in the study of medicine, or in the cultivation and improvement of arts and manufactures. By admitting nothing as matter of science which is not susceptible of experimental proof, it represses visionary speculation, and places Chemistry on the sure basis of induction; while, by the habit of verifying its doctrines in experiments performed by the students themselves, they acquire a familiarity with the objects and instruments of science, and a facility and dexterity of manipulation, which must be of incalculable advantage in their future inquiries and researches. In this respect, Practical Chemistry in Medical education, seems to bear the same important relation to Chemistry that Practical Anatomy, with the accompanying demonstrations, does to the science of Anatomy. It was from this view that the College of Surgeons of Edinburgh have introduced Practical Chemistry into the curriculum of study prescribed to candidates for their diplomas; and I have no doubt that, ere long, it will be held universally to be an indispensable branch of medical education. It therefore appears to me to be most important that provision should be made for instruction being afforded in all Schools of Medicine in Practical Chemistry; but how far it might be advantageous or expedient to separate this department entirely from the Professorship of Chemistry, is a point on which doubts may be entertained, and on which I am not prepared to give an opinion.

In regard to your qualifications and success as a Lecturer on Practical Chemistry, the strongest evidence is afforded by the great and increasing number of students who attend your Classes, and are benefited by your instructions, as well as by the opinion expressed of the value of your writings and information, both by persons of eminence in science and literature, and by those practically and extensively engaged in arts and manufactures. My humble testimony can add little to claims so well established, but having had, while one of the Secretaries of the Edinburgh School of Arts, the opportunity of observing the nature and effects of your instructions in the Principles of Chemistry, and in their practical application to Arts and Manufactures, and having had frequent intercourse with your medical pupils, one of them my son, I can have no hesitation in expressing my opinion, that the extent and accuracy of your knowledge of Chemistry, and the ability you possess of communicating this knowledge to others, as evinced in your Writings, Lectures, and Demonstrations, eminently qualify you to be a distinguished and successful Teacher of Practical Chemistry in any situation in which you may be placed.

I am, My DEAR SIR,

Yours very sincerely,

DAVID MACLAGAN.

Dr BOSWELL REID, &c.

XXXVIII.

From ROBERT STEVENSON, Esq., Civil Engineer, F. R. S. E.

DEAR SIR,

EDINBURGH, 25th February 1833.

I have great pleasure in bearing my humble testimony to the utility and great advantage of your Practical Course of Chemistry to a civil engineer; and I may mention that I generally make provision for it in the curriculum of my assistants.

With regard to the manner in which you conduct this class, I can only speak from the warmth of expression used by your pupils as to your zeal and enthusiasm, and conclude that they must reap the highest advantage from your Course.

As one of the Directors of the School of Arts, however, I have had many opportunities of making personal observation of the ease and perspicuity of your style as a public speaker.

And in the frequent intercourse which I have lately had with you, in the preparation of the apparatus for the Light-House Board, for maintaining for a length of time the flame of oxygen and hydrogen gases in Lieut. DRUMMOND's Lime-ball Experiments, I have had ample opportunity of seeing your complete and extensive Laboratory and Apparatus, and also of witnessing the facility with which you perform your chemical manipulations—a talent particularly required for a Practical Chemist.

I am,

MY DEAR SIR,

Yours truly,

ROBERT STEVENSON.

To Dr D. B. REID, &c. College.

XXXIX.

*From Dr JAMES SIMSON, one of the Examinators of the
Royal College of Surgeons.*

DEAR SIR,

42. FREDERICK STREET, 4th March 1833.

I HAVE much pleasure in testifying how highly I value your qualifications both as a scientific and practical chemist. I attended one of your practical courses of Chemistry some years ago, and was much pleased with the clearness of your explanations, the facility you had in imparting information to your pupils, the neatness with which you illustrated your views by apt experiments, and the zeal and attention you at all times shewed in whatever could be of use to those who attended your classes. I have examined the excellent apparatus fitted up in your present class-room, which clearly shews how much interest you have taken in this branch of science. Should the Patrons institute a Professorship of Practical Chemistry, I have no doubt but you will make both an able and successful teacher.

I am,

DEAR SIR,

Very truly yours,

JAMES SIMSON.

To Dr D. B. REID.

XL.

From Dr THOMAS SHORTT, F.R.S.E., Fellow of the Royal College of Physicians, and Physician to the Royal Infirmary of Edinburgh; formerly Physician to His Majesty's Forces, and Physician Extraordinary for Scotland.

MY LORD,

EDINBURGH, 54, Queen Street.

IT gives me great pleasure to avail myself of the present opportunity to express to your Lordship the high opinion I entertain of Dr D. B. REID's qualifications as a Practical Chemist, and, in justice to him, to acknowledge the gratification I received whilst attending his Popular Course of Lectures two or three years since, when, as a proof of his success as a Lecturer, a handsome tea-service of plate was presented to him by his hearers.

Having personally known him for several years, and having frequently visited his laboratory, I can most truly bear testimony to his zeal, ingenuity and accuracy in conducting the various experiments connected with Chemistry and Pharmacy, as well as to his general scientific acquirements.

I therefore have no hesitation in stating to your Lordship, that, should it be deemed expedient to institute a Professorship of Practical Chemistry, in addition to that of the present Eminent Professor of Chemistry, I know no one so well qualified as Dr REID to undertake such duties; and I most sincerely wish him every success, being satisfied that his appointment will materially add to the efficiency of the University of this City. I have the honour to be,

MY LORD,

Your Lordship's

Most obedient humble servant,

THOMAS SHORTT.

To the Right Hon.

The LORD PROVOST of Edinburgh, &c.

XLI.

*From WALTER NICHOL, Esq., A. M., F. S. A. S., Teacher
of Mathematics, Edinburgh.*

DEAR SIR,

EDINBURGH, 6th March 1833.

THOUGH well aware how little the expression of any opinion of mine can add to the high character you have established for yourself as a Teacher of Practical Chemistry, or in any way affect the views of the Patrons respecting such an appointment in the University, I should be wanting both to the claims of merit and in friendship to science to withhold it.

Of the importance of a class for that special purpose, there cannot be two opinions. Practice under a teacher is neither more nor less than the business of life anticipated, and fitness for entering upon it acquired before the age for conducting it is arrived. So far as it has been introduced into general education, it has produced earlier usefulness and capability in every art and profession; and a seven years' apprenticeship may now be looked on as the relic of a barbarous age.

Besides, it lays a foundation for accurate thinking and easy recollection which mere reading or hearing can never supply; and draws lines of distinct demarcation among complex ideas, which, however necessary to be known, in order to reason well, it is often not in the power of any language to trace.

I may also aver on the evidence of no little experience, that without the application of theory to practice, and without the reciprocal interchange of ideas between the teacher and taught in the way of mutual questions and answers, more than three-fourths of the students even with fair talents, would leave their classes much as they entered them. But really what is knowledge which it is intended never to apply, or which we have never learned the method of applying to any useful

purpose? What are lectures on Elocution to a man who has never learned to read, or demonstrations of the properties of number to one who has never practised calculation? Practice is certainly as necessary in Chemistry as in learning Arithmetic, or Music, or Medicine. In fact, there never was a Chemist made without it, and if it is not established as a branch of education within the University, it will be so without it.

In my view, too, regular courses of Practical Chemistry would contribute to the benefit of the other class; in the same way as Mechanics' Institutions, Private Lectures, and Practical Teachers, in town, by extending the desire for knowledge, serve to maintain and support one another. Institutions are best attended where there are many teachers, and teachers deal in an article of which no one could ever yet say he had enough.

But I am not more convinced of the propriety of introducing such a department of study into the University than of your singular qualifications to conduct it. When you attended Mathematics, several years since, you placed yourself at the head of my classes; and the subject being one in which mere industry, though it cannot be wanted, will always yield to acuteness of intellect, and strong powers of reasoning and invention, I have always held the station you then took as indicative of a mind, which the public, as it has done, would not be long in appreciating. I mention your aptitude in this science chiefly, however, on account of the advantages it gives you over others in the pursuit which you have chosen. The results of chemical action are every day coming more and more within the reach of calculation. The power of anticipating them in this way is that which principally distinguishes a science from a mere registration of facts; and at all events, the facts themselves are becoming so numerous, that without the stenography of algebraical notation, the registration itself will become unmanageable. There are many things, too, which could only have been discovered by a mathematician; many

detached parts to which his labours have given system and unity ; and all these, some knowledge of mathematics is required to explain. Your fitness in this respect will not surely be overlooked.

Should you succeed in your present application, I am quite sure that the appointment would contribute to the usefulness and celebrity of the University, and give the highest satisfaction to the public. I am,

DEAR SIR,

Yours with much respect,

WALTER NICHOL.

To Dr D. B. REID.

XLII.

From J. BIRKINSHAW, Esq. Manager of the Bedlington Iron Works, Inventor and Patentee of the Malleable Iron Railway Bars.

MY DEAR SIR,

BEDLINGTON IRON WORKS,
February 1833.

MY son is now in a distant part of the island, following his professional pursuits as a Civil Engineer ; but as it is possible a letter from me may find him either in London or Leicester, I hope you may hear from him in a few days. At the same time, I can easily imagine how glad he will be to render his mite of gratitude for the sincere and kind regard with which you treated him.

I certainly sent my son to Edinburgh purposely to acquire a knowledge of Practical Chemistry, combined with the Lectures of Dr HOPE ; and, in fact, my idea of the importance of it is such, that I do not consider a young man's education complete without it.

Allow me also to express my son's opinion of your high talents as a Practical Chemist and Experimentalist, your fa-

cility in conveying instruction to others, with your devotion and indefatigable industry during the time he spent with you at your Class-room in the High School Yards.

Should business draw me to Edinburgh soon, I shall feel much pleasure in waiting upon you. In the mean time, wishing you every success in what you aspire to, I remain,

DEAR SIR,

Yours very sincerely,

J. BIRKINSHAW.

To Dr D. B. REID, Edinburgh.

XLIII.

From JOHN RAILTON, Esq. Manchester.

MY DEAR SIR,

STAR HOTEL, 6th March 1833.

I cannot suffer myself to leave this city without expressing to you my clear conviction of the importance of your practical instructions, in fixing that knowledge of Chemistry they are intended to convey, in a manner very superior to a course less connected with practical results;—and should you extend the principle, as far as your personal attention can carry its efficiency, I feel convinced, from the experience of my son, that the public would be made to benefit the most by its adoption; and if, on his return to Manchester, after finishing his second course with you, he can render you any service, I am sure he will devote himself to that object with great pleasure.

I leave this place to-morrow morning, and regret that I cannot pay my personal respects to you again. I am,

MY DEAR SIR,

Very respectfully,

Your most obedient Servant,

JOHN RAILTON.

To Dr REID.

XLIV.

*From ARTHUR TREVELYAN, Esq. of Wallington,
Northumberland.*

DEAR SIR,

6. ST ANDREW'S SQUARE,
2d February 1833.

HAVING, during several Courses of Lectures with you, been satisfied of the great benefit which must be derived from your clear and excellent mode of teaching in that most important branch of scientific education, Practical Chemistry, and which you have for some years so successfully conducted in the College, I most sincerely wish your application may meet with that success which it deserves, and think the acquisition of such a Professor and Professorship will form an era in the annals of the University of Edinburgh.

Yours sincerely,

ARTHUR TREVELYAN.

To DAVID BOSWELL REID, M. D.
Assistant to Dr HOPE, College, Edinburgh.

XLV.

From M. J. BARRANDE, "ancien élève de l'Ecole Polytechnique; Precepteur de S. A. R.^e M^{gr}. le Duc de Bourdeaux."

PRAGUE, le 22. Fevrier 1833.

MON CHER MONSIEUR,

JE me fais un devoir et un plaisir à la fois de saisir l'occasion de vous exprimer mon opinion sur vos connoissances et vos talens. Votre conversation si instructive, vos leçons de Chimie publiques, et particulières auxquelles j'ai eu l'avantage d'assister, m'ont convaincu que votre esprit embrasse tout le vaste domaine des sciences chimiques, aussi bien dans leur développement théorique que dans leur applications aux manufactures et aux arts. J'ai toujours été frappé en vous entendant professer, de la clarté methodique de vos idées, si nécessaire pour enseigner les jeunes gens; et je puis assurer que de tous les Professeurs de Chimie que j'ai l'occasion d'apprécier soit en France, soit en Allemagne, aucun ne m'a paru posséder plus que vous, la facilité et la justesse de l'expression dans le discours.

Je crois donc que vous réunissez en même temps et toute la science nécessaire à un Professeur dans une de plus illustres Universités d'Europe, et les facultés qui peuvent servir à transmettre votre lumière à vos auditeurs. Je vous ferois tort en oubliant de mentionner la dextérité et le bonheur constant avec lequel vous faites réussir vos expériences pour compléter par les yeux la conviction que vos paroles portent dans l'esprit de vos auditeurs. J'aurai aussi à m'étendre longuement sur les manières aimables que vous avez avec ceux que vous instruisez, si vos compatriotes avaient laissé quelque chose à ajouter sur ce sujet.

Comme étranger j'ai dû être très sensible à vos prévenances

pour nos compatriotes et pour moi-même, et suis heureux de pouvoir vous en témoigner toute ma reconnoissance.

Agréez, je vous prie, mon cher Monsieur, l'assurance de mes sentimens les plus distingués,

J. BARRANDE,

S. Precepteur de S. A. R. M^{gr}. le
Duc de Bourdeaux.

A M. le Docteur D. B. REID, Edinburgh.

Nous ne pouvons oublier ni nos amis d'Edinburgh, ni la ville où nous avons été si bien reçus. J'ai rappelé à M. le Duc de Bourdeaux et à Mademoiselle votre nom, et vos aimables attentions pour eux dont ils eussent profité d'avantage, si notre séjour se fût prolongé dans votre patrie. Ils se sont montres fort sensibles a votre souvenir, et me chargent à vous le témoigner.

The death of Sir JOHN LESLIE and of the late JOSEPH ASTLEY during the last year, prevents me from having an opportunity of bringing forward on this occasion testimonials which would have been of great importance to me. With the late Sir JOHN LESLIE I have been much engaged for upwards of six years, not only in experiments connected with Natural Philosophy and Chemistry, but also in visiting manufacturing establishments. On the last occasion in which he was consulted, I accompanied him at his request in all his investigations*. Sir JOHN LESLIE was also intimately acquainted with the nature and progress of my classes before I had any connexion with the University, and used to be often in my class-room, both in the High School Yards and in the University.

* See the Testimonial from Mr JAMES FARNIE, Manager of the Burnt-island Whale-fishing Company.

Under the late JOSEPH ASTLEY, I studied Chemistry both theoretically and practically. I was engaged as assistant in his extensive manufactories, and lived for a long time in one of his establishments, where I was constantly engaged in conducting experiments and processes upon the large scale, and in his experimental laboratory.

Under these circumstances, I trust I may be allowed to bring before your notice two testimonials which they gave me on a former occasion. Having been prevented by my other engagements from applying for the situation of Professor of Chemistry in the London University, till long after this situation had been publicly advertised for competition (in the year 1827), I requested Professor LESLIE, who was then going to London, to inquire if any progress had been made in the election, and if I might still have an opportunity of applying : he wrote me as follows, including the annexed certificate.

MY DEAR SIR,

LONDON, 16th June 1827.

THOUGH most of the Chairs in the London University may be considered as tantamount to being filled up, you may still have some chance, and I hope the enclosed may be of some service to you. I forget the name of the official person to whom you should address it, but you will find this in the newspapers.

I am sorry that I must write in such haste at present, and only to wish you success ; go on, however, with preparing your lectures.

Ever yours,

JOHN LESLIE

XLVI.

From the late Sir JOHN LESLIE, Professor of Natural Philosophy in the University of Edinburgh, written about six years ago.

LONDON, June 16. 1827.

I FEEL confident that few are more deserving of promotion than my friend Mr REID, who is gifted with excellent talents, which he has improved with great ardour and persevering application. He has enjoyed the best opportunities, both at home and abroad, of cultivating the Theory and Practice of Chemical Science. His Elements of Chemistry, and his Improved Scale of Definite Proportions, are fair specimens of his attainments, and excite flattering expectations of the progress he will make when he has gained more experience and attained riper years. He has, besides, extended his studies to physical science in general. He lately attended one of my Courses of Natural Philosophy, and in another he afforded me material assistance, by preparing and exhibiting some of the more difficult experiments.

In short, Mr REID only wants a proper situation, and the facilities of an extensive apparatus, to enable him to diffuse information, and extend the boundaries of science.

JOHN LESLIE.

The following LETTER from DAVID MACKIE, Esq. with the accompanying Extract from a Letter written by Sir JOHN LESLIE, about seven years ago, was received after some of my Testimonials had gone to the press.

MY DEAR SIR,

GLASGOW, 24th January 1833.

HAVING shewn your brother a letter which I received from the late Sir JOHN LESLIE, recommending you to the Lectureship on Chemistry and Mechanics in the Glasgow

Mechanics' Institution, when there was a vacancy in that establishment a few years since, he has suggested to me that an extract of that portion of the letter which refers to you might prove useful in the event of your becoming a candidate for any situation in the way of your profession.

As it is possible that you may have no written attestation of the high opinion which so eminent an individual entertained of your talents and acquirements, and as it is now impossible to obtain such a credential, I have much pleasure in transmitting you the extract already alluded to. When Sir JOHN LESLIE wrote the encomium, I know that it was entirely without your knowledge, and that he had no idea that it would ever meet your eye.

I am,

DEAR SIR,

Yours very sincerely,

DAVID MACKIE.

DAVID BOSWELL REID, Esq. M. D.
Edinburgh.

Extract of a LETTER from Sir JOHN LESLIE to DAVID MACKIE, Esq. Lecturer on Natural Philosophy, Glasgow; dated Largo, Fifeshire, September 6. 1826.

“ He,” Mr REID, “ is completely versant with Chemistry, both in theory and practice, and he knows well the general principles of Mechanical Philosophy, having lately attended an experimental course in my class. He is besides possessed of great industry, and urged forward by all the ardour and enthusiasm of youth; nor is it a circumstance of small importance in a public lecturer,—he has a good address, and a clear unembarrassed elocution. Of his Chemical knowledge he has given a very satisfactory proof, by the publication of his Elements,—a work distinguished by its clearness and range of discussion.”

XLVII.

The annexed is the TESTIMONIAL I received nearly six years ago from the late JOSEPH ASTLEY, Esq.

DEAR SIR,

EDINBURGH, 11th September 1827.

I HAVE great pleasure in complying with your request, that I would state what I have had the means of knowing respecting your qualifications for the situation of Chemical Professor in the London University.

From the opportunities I have had of forming an opinion of those qualifications, both during the time you were with me as Assistant in my Chemical works, and during the several years since, in which you have applied yourself more particularly to the scientific and didactic branches of chemical pursuit, I have not the least hesitation in saying that I consider them particularly well fitted for such a situation.

From your thorough knowledge of your subject,—from the happy faculty you possess of imparting that knowledge to your pupils, and conveying a perspicuous and satisfactory comprehension of the facts and doctrines to be taught,—from the assiduous and successful attention which I know you to have paid to the experimental part of the duties of a Chemical Teacher,—and from the earnest and indefatigable solicitude and zeal with which I know you to be actuated, in discharging faithfully whatever duties you undertake, I feel myself completely warranted in pronouncing you to be qualified in a very superior degree for the office in question.

I beg to add, that the talent of public speaking, which my own observation, as well as the reports I have heard from others, have satisfied me you possess in a degree much beyond the ordinary standard, as particularly displayed in the part you have taken in the discussions at the Medical Society of this place, must no doubt add very materially to the esti-

mate which ought to be formed of your qualifications for the office of a Lecturer in the London University.

I am,

DEAR SIR,

Yours very sincerely,

J. ASTLEY.

XLVIII.

From the Directors of the Leith Mechanics' Institution.

WE, the undersigned, Directors of the Leith Mechanics' Institution, certify, That Dr D. B. REID lectured on Chemistry at that Institution, during the sessions 1829, 1830, and 1831; that his explanations of the principles of the science were full, clear, and distinct; his illustrative experiments well chosen, and successfully performed; and that his lectures and arrangements in conducting the class in every respect met our approbation.

GEORGE CARSTAIRS, Merchant.

ROBERT COLDSTREAM, Merchant.

JAMES SCARTH, Merchant.

GEORGE PRIMROSE, Dyer.

DAVID FORBES, Glass-Cutter.

ROBERT HAY, Dyer.

THOMAS CALLAM, Brazier.

JOHN GELLATLY, Agent for Carron Company.

T. BURSTALL, Engineer.

ALEX. CHALMERS, Clerk.

ALEXR. HENDERSON, Commercial Agent.

WALTER BLACKIE, Cooper.

JOHN TAIT, TREASURER.

JAMES HAY, SECRETARY.

LEITH, 30th January 1833.

XLIX.

From the DIRECTORS of the SCHOOL OF ARTS, Edinburgh.

EDINBURGH, 8th March 1833.

THIS being the fourth Session during which Dr REID has officiated as Lecturer on Chemistry to the School of Arts, the Directors have much pleasure in stating, that the Courses of Lectures he has delivered at that Institution have been highly satisfactory to them, and, they have reason to believe, to the Pupils in attendance. The distinct manner in which Dr REID has explained the various subjects of prelection, and the elegance with which he has performed the experiments requisite for their illustration, have impressed the Directors with a very favourable opinion of Dr REID's talents as a Teacher of Chemistry.

ROBT. BRYSON.

JAMES MACKAY.

THOS. SAWERS.

A. COVENTRY.

JOHN WOOD.

JOHN RUTHVEN.

H. COCKBURN.

DAVID MACLAGAN.

ROBERT STEVENSON.

ROBERT SCLATER.

SAM. MORTON.

WILLIAM THOMSON, M.D. }
GEORGE M. SINCLAIR, } SECRETARIES.

L.

Extract from the Report of a Committee of the Royal College of Surgeons, appointed upwards of three years ago, to consider the Course of Practical Chemistry conducted by Dr REID at that time.

“ Under the very peculiar circumstances in which Mr
“ REID, who has been for some time past a most industrious
“ and successful teacher of Practical Chemistry, would be
“ placed in consequence of the late Regulations of the Royal
“ College, were his courses not held to qualify his Students for
“ examination, the Committee unanimously and earnestly re-
“ commend to the College to receive certificates of attendance
“ upon Mr REID’s course for two years;—this time being
“ given to him to afford him an opportunity of qualifying
“ himself as a Lecturer under the present Regulations of the
“ Royal College.”

This Report was signed by Mr WOOD, who was at that time President of the Royal College. The Report is inserted in full at p. 22. of Dr REID’s Memorial.