THE EDUCATIONAL TIMES, AND
Journal of the College of Preceptors.


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UNIVERSITY OF LONDON.

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Chair, Mons. E.

Paper on INTERNATIONAL EDUCATION, WITH A thus to profit by the experience of the practical teachers whom I am addressing.

imperfect the study of those languages! And are French and German masters, but yet how respect and confidence, and go some way to thoughts freely with men of other nations? Will are so lasting, their mere sojourn in foreign disposal of the Imperial Commission of France for the International Exhibition, a sum of £200, to be awarded in prizes to the authors of the four best essays on the foundation of an International College, so as to promote discussion, and thus to profit by the experience of the practical teachers whom I am addressing.

Mr. Barbier, of Clermont Ferrand, struck by the many advantages which would result from international education, placed at the disposal of the Imperial Commission of France for the International Exhibition, a sum of £200, to be awarded in prizes to the authors of the best essays on the foundation of an International College.

What would be the advantages derived from such an institution, I need not tell you. To mention one only, do we not all feel very deficient in the knowledge of modern languages? And at a time when the means of rapid communication, the ever-multiplying facilities for transit, the extension of commerce under international treaties, the abolition of passports, the electric telegraph, tend to bring into contact men of different nations, is it not imperative to provide for our children the means of enabling them to exchange their thoughts freely with men of other nations? Will not, moreover, the contact of children coming from all parts of Europe, the formation between them of those school friendships which are so lasting, their mere sojourn in foreign countries, qualify them to form a better idea of what other people really are, tend to break down the barriers of the past, promote mutual respect and confidence, and so go some way to bring about the realization of that dream of all generous minds, the brotherhood of nations?

The means now employed in studying modern languages are all open to great objections. In most English schools there are four teachers of four languages, but yet imperfect the study of those languages! And can we wonder at it? The pupil has no opp...
turns all day long; one only be spoken every day—that English be spoken one day, the language should be subjected to some amusing the boys might determine.

Such a rule would soon be enforced; and boys the accumulations of which might be ex-

Still it is enough that success has some time been obtained, to convince us that, in schools composed, as ours would be, of children of different nations almost in equal num-

The next step would be easy translations and dictations. Such exercises soon enable the pupils to begin the study of grammar. But in this case it must be shown on this point. Grammar being the philosophy of language, the study of it ought not to begin till the pupils are perfect masters of the more practical or conversational part of the languages they are acquiring. The English language is a mere affair of memory; the grammatical, one of reasoning. Let us therefore teach the child words and sounds at an early age, when his memory is so elastic, if we may so call it, that he may acquire twenty words each day.

And why should they not preserve it? The child, when he comes to school, is imbued with the ideas of his family. Out of the eight years in which we conduct our schools, two are passed in his own country, besides the holidays every year; and during the other six years he inhabits not one country, but three, in succession. There cannot be the slightest doubt, therefore, that national ideas will predominate in the minds of our pupils.

Another objection is, that children of different nations associating freely together would be equally injurious in an intellectual and moral point of view; for there could be no doubt that the characters which would greatly unsettle the minds of the pupils, and what they had learned at one College would be liable to forget at the next. But Dr. Brewer said that he heartily concurred in the remarks of the Lecturer, of a narrow and selfish feeling of nationalism; but it must not be forgotten that as the lessons of one nation differed from those of others, the course of education in each country must be specially adapted to the subject, which was of the utmost importance. For example: in England the teaching of the upper classes was conducted with reference to the languages. While that of the middle classes had one or two less close relation to trade and commerce. Accordingly, except where the educational aims, which cannot be accomplished as well in any foreign country as in England, were objectionable to Mons. Barbier's plan seems to me to be the disproportionate amount of time devoted to the study of languages which exercised little or none of its beneficial influence rightly attributed to a study of classics and mathematics. Many languages were no doubt of great importance and deserved a place in the course of studies, but still they must be regarded as accessories and not as the more essential branches of education.

As to the lingua franca, the plan of educating together children of different nations has been tried over and over again, and found to succeed. I will only mention the perfectly successful experiment made near Brussels some thirty years ago, by a gentleman named Gacina, in whose school the instruction given was completely domestic, and the children of the present day several schools in Switzerland were conducted on those principles, and all successful.

This plan would, I think, be of easy ex-

Dr. Brewer admitted the excellence of an abstract idea of international education, considered that Mons. Barbier's scheme would not be found quite feasible. He thought in the removal of the pupils from one country to another would be highly objectionable. There can be no doubt that the characters which would greatly unsettle the minds of the pupils, and what they had learned at one College would be liable to forget at the next. But Dr. Brewer said that he heartily concurred in the remarks of the Lecturer, of a narrow and selfish feeling of nationalism; but it must not be forgotten that as the lessons of one nation differed from those of others, the course of education in each country must be specially adapted to the subject, which was of the utmost importance. For example: in England the teaching of the upper classes was conducted with reference to the languages. While that of the middle classes had one or two less close relation to trade and commerce. Accordingly, except where the educational aims, which cannot be accomplished as well in any foreign country as in England, were objectionable to Mons. Barbier's plan seems to me to be the disproportionate amount of time devoted to the study of languages which exercised little or none of its beneficial influence rightly attributed to a study of classics and mathematics. Many languages were no doubt of great importance and deserved a place in the course of studies, but still they must be regarded as accessories and not as the more essential branches of education.

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as could be enjoyed in similar Colleges in three other countries. Besides this, sending children into foreign countries removed them almost wholly from parental influence, which, the speaker was of opinion, ought to be paramount with children. He admitted that some would wish to send their sons to reside abroad. With reference to the amount of time proposed to be devoted to the learning of modern languages, Dr. Pearce considered that it was excessive, especially as Englishmen, he said, should be willing to send their sons to foreign countries, even if that were possible, which he was strongly inclined to doubt.

Mr. Quicke said, his objections to Mons. Barbier’s scheme went further than those of the two preceding speakers; for he did not admit the goodness of the main idea involved in it. In fact, he did not understand how an international exchange of pupils could be made. It must be recollected that there were great differences in the characters and temperaments of the French people. On the Continent, the French were more fiery and impulsive than the English, he said. Another objection to it that had been raised was that the pupils in the International Colleges would devote all their time to the study of modern languages; and it had been truly said that the acquisition of a number of languages was not a fit object to be exclusively aimed at in any system of education. But this objection, too, if carefully examined, would be seen to be quite inapplicable to Mons. Barbier’s plan, a great recommendation of which was, that it would enable children, by the natural method, to acquire a sufficient knowledge of several languages without that exclusive attention to them which, as was well known, was absolutely necessary in ordinary schools. In fact, Mons. Barbier’s scheme would reduce the study of language to its proper place as a means, not an end, in education; since the various branches of knowledge would be taught to the pupils in several languages; which would be used as instruments for use, not as final results.

Mr. Kimmer said, it appeared to him that the objectors had wandered somewhat from the point. They had spoken of Mons. Barbier’s plan as if it were intended to be universal, or at least general, adoption; but Mr. Kimmer had gathered from the Lecture that the International Colleges were designed for particular and special purposes. Dr. Hodgson said that he had no doubt Mons. Barbier would give his best consideration to the various objections that had been stated, some of which appeared to the speaker to arise from misconceived prejudice. That the speaker seemed to infer from the use of the term “International Colleges,” that national or governmental action was to be employed in their establishment. But this was not so, in the international, which signified simply common or reciprocal action among men of different nationalities. Again, Dr. Brewer was apprehensive that this scheme would tend to revolutionize the whole system of English education; in reality, however, its scope was much more limited. The promoter of Mons. Barbier’s scheme took the existence of existing facts; they were aware that large numbers of English children were every year sent to schools in various parts of the Continent; and that many foreign boys came to this country for the purpose of learning English. The practical question therefore was, shall this interchange of pupils continue as at present to be made almost at random, without any really trustworthy guarantee that those to whom the young Englishmen were to be sent were not in a condition, and that there is some approach at least to uniformity in the system of education pursued in the various schools to which the pupils are sent. Dr. Hodgson could not imagine that any one would wish such a state of things to continue; and it was in order to obviate the evils thence arising that this plan of International Colleges had been devised. Hence it was evident that the remarks of Dr. Brewer were about the unsettlement of children’s minds, by which he was not in the least deterred. He agreed with Dr. Pearce in having a strong objection to sending children away from their native country and from their families, to reside for several years among strangers, where their training, in several highly important respects, must necessarily be different from that to which they would be subjected were they to remain in their own country. Hence, he thought Dr. Pearce’s suggestion, whether the main objects of Mons. Barbier’s plan might not be secured by conferring the benefits from one land to another, well worth of consideration. The speaker said that his own sons had resided abroad for a year, one in France, the other in Germany; and they had thus gained the advantages which he would not for a moment consider with, or of his morals being corrupted. They had thus gained the advantage, which he would not for a moment consider with.

Mr. Robinson said that he thought it would be better to confine attention for the present to the main principles involved in Mons. Barbier’s scheme, and to leave details for future consideration. No doubt there were matters of great difficulty to be overcome, in getting a scheme of this kind into working order; but as the International Colleges would be under the superintendence of a Board composed of distinguished men of various nations, there was every reason to think that that difficulty would be foreseen and provided against. Foremost among the questions that would demand the attention of the Board, was that relating to moral and religious education. Unless satisfactory guarantees were given on this point, the scheme would inevitably fall to the ground; for no conscientious parent would send his child to an institution in which there was any danger of his religious principles being tampered with, or of his morals being corrupted.

Again, with respect to the teaching of history, on which Mr. Quicke had made some remarks, the duty of the Board would be to select such text-books as have a generally recognized character of truthfulness and moderation. The Englishmen would reasonably object to Thiers’ History of the Empire being put into their children’s hands as a reliable guide to a knowledge of the History of Europe during the early part of the present century; and French parents might probably make an equally valid objection to a similar use of Alison’s work. In fine, the real question was, as had been stated by Dr. Hodgson, whether children should be educated in foreign countries
Dr. Brewer, the thanks of the Meeting were unanimously voted to Mons. Barbier for his Lecture and explanations.

The CHAIRMAN said he had much pleasure in expressing to Mons. Barbier the thanks of the Meeting, that the preparatory and subsequent discussion were proofs of the advantages that might be expected from extended international intercourse, the increase of which was one of the best and most encouraging signs of a world in which the objects of all friends of progress and improvement should keep in view, was to imitate what was good in other countries, and thus gradually to remove national prejudices and enmities.

The next Evening Meeting will take place on Wednesday, December 16th, when the Rev. W. Fleming will read a Paper on "The Method of Teaching History, by the use of Eleemosynary Education." (Read before the Social Science Association.)

Or the many institutions that go under the common name of hospital, it is my purpose to speak exclusively of those where boys and girls are boarded and educated out of some charitable fund. The total number of this class in Scotland, including two newly erected, is, so far as I can learn, fourteen. Most of these are in or near Edinburgh, which was perhaps due to the fact that Edinburgh is a city where there is a great demand for hospital accommodation. "The City of Hospitals." The first hospital established in this country was George Heriot's in 1628, after the model of Christ's Hospital, London. The founder's bequest was little more than an endowment of £30, the annual income being £16,000 and £17,000, with a prospect of still further increases. Out of a portion of this revenue, 180 sons of Edinburgh orresses receive a liberal board and education, followed by an apprenticeship fee of £10 for five years, or a college exhibition of £30 for four years. The surplus funds, amounting to several thousand pounds, are devoted to the education of upwards of 3000 pupils in twelve foundation schools established by powers of Act of Parliament, of which George Heriot's is the best. All the Scottish hospitals, except three, take the names of their founders, which to some persons sufficiently explains why the establishment of George Heriot's has been so infectious in Scotland. Unfortunately, however, for this suspicion, the three very hospitals that do not satisfy superficially fail to discern the average of male children of poor and other countries, and thus gradually to remove national prejudices and enmities.

In conclusion, Mons. Barbier remarked that Mr. Robson's observation respecting Thiers' History, had reminded him of an incident that had recently occurred to himself; and which, as he had illustrated what he had said about the feeling of nationality, he would relate to the Meeting. Being a short time ago in Brussels, he had paid a visit to the hospital occupied by the Belgian Legislation, which is adorned with paintings. On approaching one of these, his guide said, "If you are a Frenchman, you had better not look at this picture." On being asked for an explanation of this strange suggestion, the guide replied, "As the picture being the battle of Waterloo, it would, to a doubt, be very disagreeable to you to look at it." Mons. Barbier, however, said that he had not the least repugnance to examining the pictures, so far from regretting the defeat of the French, as he was convinced that the result of the battle was for the benefit of his country, as well as of Europe at large. Had Napoleon prevailed at Waterloo, the speaker was afraid that his success would have been to the advantage of at least a hundred years; and consequently he could not be a patriot, rejoice in the actual result of the contest.

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In conclusion, Mons. Barbier remarked that Mr. Robson's observation respecting Thiers' History, had reminded him of an incident that had recently occurred to himself; and which, as he had illustrated what he had said about the feeling of nationality, he would relate to the Meeting. Being a short time ago in Brussels, he had paid a visit to the hospital occupied by the Belgian Legislation, which is adorned with paintings. On approaching one of these, his guide said, "If you are a Frenchman, you had better not look at this picture." On being asked for an explanation of this strange suggestion, the guide replied, "As the picture being the battle of Waterloo, it would, to a doubt, be very disagreeable to you to look at it." Mons. Barbier, however, said that he had not the least repugnance to examining the pictures, so far from regretting the defeat of the French, as he was convinced that the result of the battle was for the benefit of his country, as well as of Europe at large. Had Napoleon prevailed at Waterloo, the speaker was afraid that his success would have been to the advantage of at least a hundred years; and consequently he could not be a patriot, rejoice in the actual result of the contest.

On the motion of Dr. Pearce, seconded by Dr. Brown, the thanks of the Meeting were unanimously voted to Mons. Barbier for his Lecture and explanations.
that insensibly radiate from the character of father and brother—are modified by frequent opportunities of visiting parents and relatives. No wonder that many, looking simply at this sum of advantages, regard hospitals as un-

teresting and even repulsive to the character of some defect (physical, mental, or moral), have been brought into circumstances rendering necessary the gratuitous education of their children; in others, as in the case of orphans, from the want of that active and sustained interest on the part of parents, which is as-

sumed to be felt when a pecuniary sacrifice is made for their children's education. In regard to the alleged relaxation of the filial tie on the part of the hospital children, such a fact is, theoretically at least, quite conceivable in many cases. If, during that very important interval between his seventh and fourteenth year, he is almost altogether away from the home circle, it is un-

reasonable to expect that he can learn the practice of filial duty so completely as a child who, though the whole or part of this interval, are morning and evening, and during that important portion of the day when meals are taken, under the parental eye and subject to parental authority. It is, therefore, to be expected that in formal education elsewhere, but not parental discipline. There is no substitutional discipline, call it by what-

ever name you please, which can fully repre-

sent the instinctive tenderness and sense of responsibility of home discipline. Besides, the authority of the substitute parent can never be equally effective, when it requires to be exercised over so large a number as, in some cases, 180 children, especially in those institutions where, owing to the non-residence of most of the Masters, the head of the house-

hold is only partially aided by educated men in carrying out his views, a large share of the domestic and playground supervision, and the whole of the bedroom supervision, being com-

pletely left to the care of the boys, who, with every desire to be faithful, cannot be ex-

pected to be influenced by any high educational ideal. Moreover, on holidays and visiting-days, there is a natural tendency for parents to treat their children according to the requirements of the wholesome and comfortable lodgings to which they had been accustomed, are not to be found to a similar extent at their parents' houses. Even the best nurses, who, with every desire to be faithful, cannot be ex-

pected to be influenced by any high educational ideal. Moreover, on holidays and visiting-days, there is a natural tendency for parents to treat their children according to the requirements that the inmates do not cease their connexion=

with it until they have attained their seventh-

year, the example and influence of the well-born seniors being more operative for good than any amount of correct precept not exhibited in practical action.

It will have occurred to many the effect of the hospital system on parents, and, as long as that system shall continue to be exercised over so large a number as, in some cases, 180 children, especially in those institutions where, owing to the non-residence of most of the Masters, the head of the household is only partially aided by educated men in carrying out his views, a large share of the domestic and playground supervision, and the whole of the bedroom supervision, being completely left to the care of the boys, who, with every desire to be faithful, cannot be expected to be influenced by any high educational ideal. Moreover, on holidays and visiting-days, there is a natural tendency for parents to treat their children according to the requirements of the wholesome and comfortable lodgings to which they had been accustomed, are not to be found to a similar extent at their parents' houses. Even the best nurses, who, with every desire to be faithful, cannot be expected to influence them in the same way.

5. Effect of the hospital system on parents, and, as long as that system shall continue to be exercised over so large a number as, in some cases, 180 children, especially in those institutions where, owing to the non-residence of most of the Masters, the head of the household is only partially aided by educated men in carrying out his views, a large share of the domestic and playground supervision, and the whole of the bedroom supervision, being completely left to the care of the boys, who, with every desire to be faithful, cannot be expected to influence them in the same way.
of home-bred boys, might supersede the lower.

might be made fifteen or sixteen instead of

11. James Donaldson's 180 boys

10. John Watson's 63 boys and

9. James Donaldson's 150 boys

8. Louis Cauvin's 26 boys

7. James Schaw's...... 21 boys

6. George Watson's 86 boys

5. Robert Gordon's 150 boys

4. Orphan..............114 boys

3. Trades' Maidens'...48 girls

2. Merchant Maidens' 80 girls

1. George Heriot's ...180 boys

At what Age Admitted. At what Age Leaving. Class of Education given. Annual Revenue. Amount of Pecuniary or other Aid on or after leaving.

7 to 10. About 14 Liberal, viz., such as is given in the best Middle-Class Day Schools. Upwards of 16,000.


7 to 10. About 17 Liberal. About 1250.

7 to 10. About 14 Liberal. About 3890.


7 to 10. About 14 Liberal. About 5000.

7 to 10. About 14 Liberal. About 3200.


7 to 10. About 14 Liberal. About 3200.


7 to 7. About 14 Liberal. About 500.†


7 to 10. About 14 Liberal. About 3200.

At what...of class...situations. I can only hope, in conclusion, to-
UNIVERSITY INTELLIGENCE, &c.

OXFORD, Nov. 2.

There will be a学会 at Christ Church, on Friday, December 11th, an election to one junior studenthip, which will be adjudged to the candidate who shows greatest proficiency in physical science. The subjects of examination will be chemistry, experimental physics, and physiology; and candidates will be allowed to state in which of these branches they desire to be examined. Candidates will first be examined in classical subjects, so far as to test their fitness to enter the University. The studentships will be of an annual value of £50, per annum, exclusively of rooms, and will be tenable for five years. Any one will be admitted as a candidate who has not exceeded his eighteenth year from matriculation. Candidates must call upon the dean, with certificates of baptism, of good character, and, if members of the University of standing, on Monday, December 7 at 12.30 p.m.

Mr. T. P. Garnier, B.A., of Balliol College, has been elected to a Fellowship at All Souls College.

In a Conversation held this morning the following gentlemen were approved as Examiners in the first examination required for the degree of Bachelor of Medicine, viz.:

G. Rolleston, D.M., Pembroke; H. J. M. Smith, M.A., Balliol; Sir C. B. Bridgcll, A., Balliol; and for Examiners in the final examination for the same degree the names of:


In the same Conversation the nomination of Mr. Robert Boulton and Mr. Charles Currie, as the official teacher of the German Language, was also approved.

A Congregation was held immediately afterwards, when the following list of Public Examiners, who had been nominated by the Vice-Chancellor and Proctor, was acquiesced in, viz.:

- W. F. Donkin, M.A., University; C. L. Dodgson, M.A.;
- Christ Church.
- Science Naturalis.

The following were also conferred:
- B, and D.D. by Accumulation.
- Rev. W. L. Pope, Pembroke, Doctor of Medicine; James Andrew (Fellow), Wadham.

Master of Arts.—Arthur Weech (abest in India) and Richard John Martin, Exeter; Arthur H. Church, Lincoln; Frances B. Tarver, Morton; Rev. Charles Ring Hutchinsen, Brasenose; Rev. William Henry Boulton, Queen's; Rev. Charles R. Bradburry, Trinity, John Prescott and Rev. Joseph Horden Dukes, Wadham; Rev. Charles Collyer, subjects of the above, Robert L. Morris, Pembroke; Rev. Samuel W. E. Bird, St. Mary Hall; Rev. Alfred T. Bythre and Rev. Edmund Tew, Magdalen Hall; Rev. Frederick W. Fryer, St. Edmund Hall.


Bachelor of Arts.—Hon. A. J. R. Anson, Christ Church; Thomas Atkinson, University; Byam M. Davies, Christ Church; William Johnson, New Inn Hall.

No. 16.

An examination will be held in Magdalen Hall, on Tuesdays and Thursdays, for the following, for the purpose of electing a scholar on the Meeke foundation, and an examination on the Lucy foundation, to which the candidates are required to call on the Vice-Principal on or before Monday, the 7th of December, with testimonials from their respective Colleges or Schools.

The Dean of Ecclesiastical History (Dr. Stanley) proposes to give his usual course of lectures on the 'History of the Early Christian Church' in the University beginning on Tuesday, the 17th of November, at 1 p.m., and continuing on Tuesdays, Thursdays, and Saturdays, till the necessary course is concluded.

Nov. 19.

The Examiners in the Final Classical School have the subjoined class list:

- Cheyne, J. Trinity.
- Duncan, Love, New College.
- Fawcett, J. B., Exeter.
- Appleton, C. E. C. B., John's.
- Bousfield, J. H., Queens.
- Butler, F., H. Merton.
- Colyer, J. M., Univ.
- Copena, F., Magd.
- Gambit, J. G., Magdalen.
- Armstrong, T., Oriol.
- Briggs, L. C., St. Edm. 
- Foukes, Lambeth.
- Hannam, A., Merton.

There will be an election to two Fellowships in Brasenose College—one Classicus, the other Mathematics—on Friday, the 5th of February, 1864. Candidates are requested to call on the Principal on or before Monday, the 25th of January. They must produce 1. A certificate of baptism. 2. A certificate of the degree of B.A., or of having passed all the examinations required by the University for that degree.

CAMBRIDGE, Nov. 5.

An election of a member of the Council took place to-day in the Senate-house, to supply the vacancy occasioned by the resignation of Mr. Bright, Tutor of Magdalen.

The votes were:

Mr. Campion, Tutor of Magdalen. . 45
Mr. Power, Tutor of Pembroke. . 39
Mr. Ferrers, Tutor of Caius. . 18

The Carus Greek Testament Prize for 1864.

The examination for this prize will commence in the Senate-house on Thursday, November 12 at 11 a.m. The examiners are the Rev. R. Burn, of Trinity College, and Rev. E. H. Perrone, of Corpus Christi College. Candidates must send in their names to the examiners not later than Monday evening, November 9. The prize is open to all Students, whether undergraduates or graduates designated in arts or law, who are of sufficient standing to be admitted by the degree of Bachelor in Arts or Law. Candidates are requested to send their names under cover to the Rev. R. Burn, Trinity College.

No. 7.

The Board of Classical Studies have signified that the Regular B.A. examination in the Easter Term of 1865 and two following terms are:


There will be an examination for the Crosse Scholarship on Wednesday, the 18th of November, and the following day, in the Divinity lecture-room. The candidates may be Bachelors of Arts of any year, under the standing of Master of Arts. Candidates are required to give the name of the Vice-Chancellor on or before Monday, the 16th inst., of their intention to present themselves for examination, stating their names at length and college.

DURHAM, Nov. 5.

Denis Embleton, M.D., F.R.S. Redhead in Medicine, has been elected a member of the General Council of Medical Education and Registration of the United Kingdom for the term of five years.

The Newby Scholarship of 211. a year will be open to competition on Dec. 10, &c. It is entirely classical and is open to all undergraduates who are not yet matriculated, and to all undergraduates who are not yet admissible to the final examination for B.A., and is tenable till the scholar is admissible to that examination.

UNIVERSITY OF LONDON.

The following are Lists of Candidates who passed the respective Examinations indicated:

Second B. Sc. Examination.—Entire.

First Division.

- Buck, B. H., Carpenter, J. E., New College.
- Evans, D., Field, W., Hunter, R., New College.

Second Division.

Abrahams, L. D., University.
- Ainworth, J. S., University.
- Antis, G. W., Pictures, De Courcy, Rev. J. W., New College.
- Bailey, R., University.
- Baker, J. P., University.
- Barrett, J., University.
- Blackie, J. M., New College.
- Brown, G. W., University.
- Warington, University.
- Cock, J. T., University.
- Cooper, J. F., University.
- Curwen, E. C., University.
- Dows, C. B., University.
- Davis, W., University.
- Eastern, W., University.
- Fryer, J. F., University.
- Gardner, H. S., University.
- Fodeford, H., University.
- Graham, H. W., University.
- Kitson, J. H., University.
- Klimborowski, A., University.
- Nolan, J. W., University.
- Morgan, W. C., University.
- Morris, H., University.
- Muxlow, T., University.
- Oliner, W. C., University.
- Page, W., University.
- Pearson, University.
- Pickering, R., University.
- Potts, J. F., University.
- Rayner, E., University.
- Reynolds, B., University.
- Rockford, J., University.
- Smith, C., University.
- Stockenström, A., University.
- Thomas, J. M., University.
- Weitsch, H. W., University.
- Wood, Rev. J., University.
- Wood, J., University.
- Woodman, J. V., University.

Second B. Sc. Examination.—Entire.

First Division.

Birkenhead, E. H., Royal College of Mines.
- Birkenhead, E. M., Royal College of Mines.
- Foster, C. Le Neve, Royal College of Mines.
- Knox, G. W., University College.
- Mills, E. J., Royal College of Chemistry.

Second Division.

Barrett, E. L., St. Bartholomew's Hospital.
- Bilton, C., St. Bartholomew's Hospital.
- Bruce, A. (First M.B.), University College.
- Flight, W., Queen's College.
- Pringle, G., Queen's College.

Organic Chemistry and Geology and Palaeontology only.

Second B. Sc. Examination.—Entire.

Fisch, F. G., B.A., Royal College of Mines.
EDUCATIONAL AND LITERARY
SUMMARY OF THE MONTH.

The University of Cambridge has at length made a move in the direction of providing special assistance for candidates preparing for the Indian Examinations. It has been announced that this has been for several years provided in Oxford and Dublin. A committee was appointed by the Vice-Chancellor to consider the question, and it was at the suggestion of the committee that the University College, London, by the donation of Mr. John Pakington, M.P., and the Right Hon. E. B. Horsman, M.P., was enabled to receive at that College, "without any restriction of University Class Lists or Report. This, according to a letter from Mr. Charles Grey, Secretary to the University of Cambridge, is merely intended as an experiment."

The subject of a university for Wales is at present exciting considerable attention throughout the Principality, and the objects, with a soiree, and in the evening a general meeting. The following statistics show the progress of the Union: 1858, 329 in class; 1859, 293; 1860, 1697; 1861, 853; 1862, 1450; 1863, 1418. At the evening meeting, Sir John Pakington, Bart., M.P., and the Right Hon. E. B. Horsman, M.P., were present, and delivered addresses, which were exclusively devoted to educational matters.

From the Report of the President of Queen's College, Oxford, for the winter session ending March 1, 1863, presented to Parliament, it appears that the total number of students in 1852-53 was 154; now there are in attendance 388; of these 335 are matriculated. During the past year 187 young men entered the College for the first time, of whom 115 are matriculated. Since the session 1857-58, there has been an increase in the total numbers in attendance of 181. At the College, with a body of 157 freshmen, four other students entered the College, but having ceased to attend, their names have been erased from the rolls.

A donation of 3000L. has just been made to the University of Cambridge, by Mr. John Pakington, M.P., and the Right Hon. E. B. Horsman, M.P., in testimony of their sense of the advantages which many natives of India have derived from the attainment of the object in view. Mr. W. Sheridan Knowles Mackay, Esq., student of the Middle Temple; and Mr. Robert H. Harper, Esq., student of the Inner Temple; and Mr. Robert Wilkinson, Esq., student of Lincoln's-inn Hall; Mr. Joseph Kimminck, Esq., student of Lincoln's-inn Hall; Mr. Adolphus C. T. M. Tait, Esq., student of the Inner Temple; Mr. Frederick B. M. Mongomerie, Esq., student of the Inner Temple; Mr. Joseph Whewell, Esq., student of Lincoln's-inn; Mr. George Cardale, Esq., student of Lincoln's-inn; Mr. Robert W. Burgess, Esq., student of the Inner Temple; Mr. W. Rix, Esq., student of the Inner Temple; and Mr. Sheridan Knowles Mackay, Esq., student of the Inner Temple.

MONTHLY RECORD OF SCIENCE AND ART.

The Winter Session of the various Metropolitan Societies of Science and Art have commenced; Burlington and Somerset Houses have again opened their portals, and scientific London is again abuzz with the enthusiasm which has characterized this season. The Geological Society has broken ground in the Nile Valley; the Fellows of the Geographical Society have listened to Baron von Deckens' narrative of his remarkable explorations in the terra incognita of Equatorial Africa; and the Society of Arts this year a new feature to its proceedings, a series of lectures, (in addition to the paper, Newtown, at the ordinary Meetings,) under the title of ' The Geographical and Statistical Position of the Cornish Mining Districts' by Dr. 1. A. Fraser, F.R.S., and G. H. Hastings, Esq., Barrister-at-Law.

The Lectures at the Royal Institution of the British for the ensuing season will include courses on Experimental Chemistry, and "International Commerce."—"The Musical Elements," by Professor Frankland; "The Moscheological Chemical Phenomena of Animal Life," by Mr. John L. Wardlaw; "Falling Stars and Meteorites," by Mr. Alexander Herschel; and "The History and. Practice of Electrical Motion." The Edinburgh papers have given reports introducing the Lectures of the Principal of the University of Edinburgh, in the report of the inaugural address of Mr. H. W. Bunsen, to the Principality, has signified his willingness, through Dr. Nicholas, of Carmarthen, one of the committee of the principal noblemen, gentry, and merchants of the Principality, and the matter is likely to be authorized the printing of extra copies of the press, are very conflicting. The Guardian, for some weeks past been going the round of the universities, Wales ought to be placed in similar circumstances." From the Report of the University of Cambridge Local Examinations, which have been completed, the answers have been passed, and for such periods, as he may think fit; an and for such periods, as he may think fit; an...
importance of this arc was pointed out as far back as 1825 by Major-General (then Captain) Sabine, who, in his "A Sketch of the Geography of the Central Sahara," first noticed the variations of the sun's altitude, and explained it in the sense of the "transpiration" of the atmosphere. He was able to observe in the management of his nose and his satire. Prates, the Delphin editor, who had seen the manuscript, thought that "nunus unius nasibus indulges," he does not mean that Persius was not to turn up his nose, but that he was not to turn it up too much. This moderation, this ne quid nimia, is much the same as succession, "tossed up," and some such sense, he justly remarks, to make non sequi equivalent to emuncto, from Horace's emuncta naris, as is done by the scholiast, is utterly away from the mark; for who would say "emuncto suspendere nare," or, what would be still more ludicrous, "emuncto divise," suspendere nare? It might also be asked why, if Persius regarded Horace as keeping his nose in its natural state when he was playing the satirist, that member of Horace's face should have been mentioned at all by Persius in speaking of Horace as a satirist. He has made no use of his sword which will scarcely be praised for having shown his skill at cut and thrust with it.

A letter addressed to the Editor of the Educational Times.

SIR,—I beg leave to offer a few remarks on the letter of "Zeta," in your last number, regarding such words as interea, antea, postea.

It is not sufficient to say, with Key's Latin Grammar, that these words "appear to be corrupted from accusatives in am." If we are required to believe the ea in these words to be accusative, some proof of their being so is necessary; but such proof the letter of "Zeta" fails to afford.

We know from Quintilian that the accusative am, from nominatives in short ae, is short. We have therefore a right to conclude that am in the accusative is, am, id, is short. What testimony is anywhere to be found that if the m in enim were dropped, the word could be one already? What instance is anywhere to be found of the final m in any short syllable being dropped, and the vowel preceding it being in consequence made long?

The examples given by "Zeta" do not bear upon this point. The omissions of letters in divisi for dieis, mobilis for mobilis (not mobilis), are omissions in the middle of words. So that is of m in refert (taken as one word) for rem-fert, supposed that to be the right construction of the word; and this instance is nothing at all to the purpose, for the e in re is long by nature, and must therefore continue long before the consonant in refert, whether it be for rem-fert or not.

Again expressing my desire for proof, I am, Sir, &c.

Dublin, 27th Nov., 1863.

Zetetes.

To the Editor of the Educational Times.

SIR,—I shall feel obliged if you will insert this letter in your columns, in the hope that it may tend to some extent in favour of the gentlemen, who are supposed to be engaged in editing authors for the well-known "Bibliotheca Classica" series, under the supervision of Mr. George Long. It is now, I believe, quite twelve years ago since Mr. William George Clarke, Fellow of Trinity College, Cambridge, and Public Orator of that University, announced by advertisement that the first volume of Aristophanes's "Comedies" was forthcoming, or at all events "in preparation," for the "Classical Library." As Mr. Clarke has for a long time past made no sign that his promised volume will soon see the light, may I ask him, if he has altogether relinquished his intention of editing the famous "Greeks'?"

- A Greek Comedian? As Aristophanes can do anything. The supreme good of the French and German grammarians, that the first volume of the "Comedies" is nothing at all to the purpose, for the e in re is long by nature, and must therefore continue long before the consonant in refert, whether it be for rem-fert or not.

Again expressing my desire for proof, I am, Sir, &c.

Dublin, 27th Nov., 1863.

Zetetes.
promised volume, it will be at least twenty-four years before this gentleman can hope to complete his task; if he proceed at his present rate. The subscribers will have to know the cause of this delay, and I think they have a right to know it. Other scholars who might have undertaken an edition of Aristophanes with success, have been deterred from so doing by the prestige of the Bibliotheca Classica, and Mr. Clarke's reputation for scholarship. Is Mr. Clarke so very slow in executing his task from sheer painstaking and over fastidiousness? Monage tells us of a French litterateur, M. Patru, who spent four years and four months on the first sentence of Cicero's oration "Pro Archia", without being so far satisfied with his success as to commence the second. We fear we cannot excuse the dilatoriness of the Cambridge Public Orator on this score. Mr. Thompson will have finished his task somewhere about the year 1894. This gentleman also has found time to edit other works since he undertook to edit Aristophanes for the Bibliotheca Classica: last but not least among which works is a pandered edition of "Shakespeare," the fourth volume of which is promised in March next.

Another gentleman not less dilatory than Mr. Clarke is Mr. W. H. Thompson, Regius Professor of Greek at Cambridge, who undertook to edit Plato for the Series, and who has been working at his first volume, which is to contain three dialogues. As at this rate Plato's works in the Bibliotheca will range over at least eight volumes, hopeful persons may calculate that Mr. Thompson will have finished his task somewhere about the year 1894. This gentleman also has found time to edit other works since he undertook his edition of Plato. Another very dilatory contributor is Mr. Butler, a brother of the Head Master of Harrow: a portion of whose edition of Tacitus was long ago announced as forthcoming.

Might we be permitted to remind these gentlemen, that since they undertook the several tasks alluded to above, Mr. Paley, a scholar probably not inferior to any one of the trio, has published three volumes of Euripides, one volume of Hesiod, and one volume of Eschylus; to say nothing of the "Fasti of Ovid," and the poems of "Propertius." Mr. George Long, too, has managed to edit the whole of Juvenal's Odes for the Series. The reader will perhaps think, at first hearing, that Mr. Clarke is perhaps the most dilatory of the trio, Methuselah.—I am, Sir, your obedient servant.

Tullius at vanum augurium cognovit et omen; Ille fact sui papiens; plebs stolidus aegro manuet. Omnes in terris hodie ignorantiar polit.; Viribus ista regis pectora stulta virum; Religio nihil isti; est nihil sapientia vera; Spes, facies, species, ut des, ubiquit. 않을. "Prelux quia poteramus causa non." Sie dixit sapiens; plebs malesana nugata. Oct. 15, 1863. R. W.

SCALE FOR ADVERTISEMENTS.

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In another column will be found an interesting account of the system of education as carried out in the Scottish Hospitals in Edinburgh and elsewhere. About some of these institutions, even in Puritan Scotland, there still lurs an air of monasticism. The masters are obliged to be celibates, and the children very rarely leave the precincts of their hospital to visit their friends or acquaintances. In most of these hospitals, as we are told, the best possible kind of education is given to the youthful inmates. The average age of admission is eight years, and the average period of residence about six years, although occasionally it extends to eight or nine years. In Edinburgh, the head-quarters of the majority of these institutions, no less than between £40,000 and £50,000 are spent annually in educating about 860 children. If this large sum be judiciously expended, it ought, unquestionably, to effect a great boon upon the Scottish public. In a country of such limited resources, it is necessary that all boys be educated to the best of their ability, without knowing the alphabet. The headmasters of the various institutions will be doubtless a delight and a pleasure to the students at home, and will be a source of great satisfaction to the public. The headmasters of the various institutions will be doubtless a delight and a pleasure to the students at home, and will be a source of great satisfaction to the public.
Dr. Bedford, that the comforts of the Scotch Hospitals are greater than the boys are usually accustomed to in their own homes, and that therefore they are reluctant to return to their families, it will not apply to the pupils of the great London school, who are, we suspect, as a whole, of a class in society very much superior to the ordinary pupils of the Scotch hospitals, being chiefly the sons of professional men, officers in the army and navy, &c. We think that at Christ's Hospital, as at Heriot's Hospital, seven is too early an age for boys to be admitted. If, however, they were allowed to enter the school up to twelve, it would undoubtedly be necessary to institute a preliminary examination. At present it seems to us a monstrous thing that educated gentlemen, such as are the masters of Christ's Hospital, should be expected to teach boys the very elements of reading and spelling. The whole of Dr. Bedford's paper is an interesting one; but the general conclusion we come to from it, is that a long separation of boys from their parents and from general society is, as it might be expected to be, injurious to young children.

CORRESPONDENCE.

To the Editor of the Educational Times.

Sir,—The List of Masters, &c., and of Junior Pupils who passed at the Oxford Local Examination in June, given at page 179 of your last Number, possesses considerable interest. There is, however, another point of view from which the work may be regarded, and which, with your permission, I will submit to your readers, placing the names, for the sake of comparison, in the same order on the list as was done by the Rev. R. V. Taylor.* (See Table below.)

It may be stated without fear of demur from any man skilled in the science of education, that Latin, Greek, and Mathematics form the 6 only.

#TABULAR VIEW.

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*57. Mr. E. Lord, Pontefract                         2 36 18
58. Mr. S. Penner, Torquay                          2 30 15
59. Mr. J. Richardson, Manchester                    2 24 12
60. Mr. E. H. Sharp, Manchester                      2 22 11
61. Mr. J. Aldridge, Yorvill                         2 20 10
62. Mr. J. Collier, B.A., Rochdale                   2 20 10
63. Mr. J. Cross, B.A., Bletchingle                   2 16 8
64. Mr. F. Ewen, L.C.P., Birmingham                   3 30 10
65. Mr. S. Featherstone, Barnstable                   3 24 8
66. Mr. J. Garland, Warravin                         3 24 8
67. Mr. R. Highton, London                           3 20 6
68. Mr. R. Hurman, Cowley                           3 16 4
69. Mr. W. P. Knightley, L.C.P., Eltham              3 12 3
70. Mr. T. Lane, Doncaster                           3 12 3
72. Mr. C. P. Mason, B.A., M.C.P., Denmark Hill      3 10 2
73. Mr. T. B. Pickles, Rochdale                      3 8 2
74. Mr. D. Porter, Nottingham                        3 8 2
75. Mr. J. Rosson, B.A., Manchester                   3 6 2
76. Rev. J. H. Willey, Fulneck                        3 4 2
77. Mr. T. Burton, Brighton                          3 4 2
78. Mr. A. Blangfield, B.A., Whitechapel              3 4 2
79. Dr. Davis, Swansea                               3 2 2
80. Mr. G. Dennis, Kentishbere                         2 11
81. Mr. G. Edmondson, F.C.P., Stockbridge            2 11
82. Mr. G. Christmas, M.C.P., Caversham              2 11
83. Mr. W. J. Mantle, M.C.P., Leeds                   2 8 6
84. Mr. R. Rush, B.A., Northampton                   2 6 4
85. Mr. T. Ward, Bolton                              2 6 4
86. Mr. J. Heath, M.C.P., M.C.P., Totteridge           2 4 2
87. Mr. E. T. Wilson, M.C.P., B.C.                    2 3 1
88. Rev. F. E. Allen, M.A., Chardstock               2 3 1
89. Rev. Dr. Ashby, B.A., Enfield                     2 2 1
90. Mr. W. N. Barker, B.A., M.C.P., Enfield           2 2 1
91. Rev. Dr. Bartle, Walton                           2 1 1
92. Mr. J. E. Bingle, Richmond                        2 1 1
93. Rev. E. Booger, M.A., Southwark                  2 1 1
94. Rev. C. Clarke, M.A., Stafford                   2 1 1
95. Rev. R. J. Drake, St. Austell                     2 1 1
96. Dr. C. W. Hanksin, Southampton                    2 1 1
97. Rev. Dr. R. H. Kilkelly, M.A., Torrington         2 1 1
98. Rev. W. R. Littledale, M.A.                       2 1 1
99. Rev. R. Love, M.A., Egremont                      2 1 1
100. Rev. Dr. Morgan, M.A., Birkenhead                2 1 1
101. Rev. W. Porter, B.J., J. Steward, Hastings       2 1 1
102. Mr. T. Proctor, Manchester                       2 1 1
103. Mr. W. Sharrand, Exmouth                         2 1 1
104. Mr. E. R. Shaw, B.A., Yale                        2 1 1
105. Mr. G. Stewart, Alton                           2 1 1
106. Mr. J. Swalewell, Swalewell                        2 1 1
107. Mr. R. Thomas, Caistor                           2 1 1
108. Rev. Dr. Wright, Colchester                      2 1 1

P.S.—If the value of the preliminary work, in each instance, be taken at 4; this number, added to the average in the last column, will give the total value of the work which has been done. This will materially affect the proportion shown above. Thus, if the average numbers are, in two instances, 30 and 12, or in a ratio of 3 to 1, the value of the first boy's work would seem to be 3 times that of the second; but if we add 48 to each for preliminaries, we have 84 and 60, or a ratio of 7 to 5 only.

THE EDUCATIONAL TIMES. 205
In the above Tabular view, made on the principle just described, the first column of figures on the right-hand side gives the number of pupils passed; the second, the aggregate of marks obtained by the whole; and the third, the average of marks for each pupil. The total number of pupils is 428, of the aggregate marks, 7364; giving an average, on the whole, for each pupil, of 17.2.—I am, Sir, Yours &c.

JOHN ATKINSON.

Warrington, Nov. 20, 1863.

To the Editor of the Educational Times.

Sir,—Much stir is being made in certain quarters about a Scholastic Registration Bill, to secure the interests of middle-class schoolmasters, and to protect parents from imposition.

However good in itself such a Bill might be, and however desirable it is to raise the status of middle-class schoolmasters, it appears to me that the College of Preceptors, as at present constituted, is not a body by whom such an initiative in such a measure. Supposing such a Bill to be introduced into the House of Commons, the first question asked by all intelligent members would be, Who and what are the men who are coming forward with such a Bill? I would seek to obtain membership "by recommendation," who would not be able to pass the examinations required for the various diplomas of the College.

That such men should be admitted as members of the College is, I think, a great hardship to those who have gained their diplomas by examination; and it is a still greater hardship to examiners, and greatly diminishes the value of their certificates, that unexamined members should be classed with them in the Annual List with any mark to distinguish the one from the other.

If the College of Preceptors had reserved their membership and degrees for those who passed, the prescribed examinations, leaving the title of Fellow or Member of the Council, to those gentlemen of undoubtedly high educational distinction who have associated themselves with the College, and to such others as should from time to time be elected by the Council and Members on the ground of having attained such distinctions, the certificates and diplomas would now possess a far higher value than they do, and would be much more eagerly sought after.

I am persuaded that I shall have the majority of Members with me in this opinion, especially those who, like myself, have incurred the chargeable expense and trouble of going through the examination, and have derived little, if any, advantage from it.

What we require is not so much a Registration Bill as a "Schoolmasters' University," in which degrees should be granted for proficiency in various branches of learning, combined, with power of imposing fees, and which the College should also suggest for consideration, previous to the next half-yearly Meeting. The propriety of re-arranging the List of Members, so that it may be clearly understood who have passed their examinations, and of inserting after the degree of each graduate the name of his University.—I am, &c.,

SIR CHARLES SHARP.

The College, Huddersfield,
Nov. 17th, 1863.

[We give Mr. Sharp an opportunity of replying to views, although on many points we cannot express our concurrence with them.—Ed. E.T.]

REVIEWS, NOTICES, &c.

First English Reading Book.
Second English Reading Book.
Third English Reading Book.
Fifth English Reading Book.
Sixth English Reading Book.
Advanced Reading Book.


The fact that the bulkiest and most costly (or at any rate the most inexpensive) of these volumes has passed through the several editions, shows that some such series as that before us—once cheap, well selected, and carefully graduated—was imperatively called for. Each volume in the series comprises extracts of "Intellectual and moral culture," which are rather oddly phrased, and extracts of "Moral and religious instruction and poetical extracts." With regard to the extracts classed under the first of these heads, the editor says:

"In giving such instruction, however, a lower estimate has been assumed by the Editor of the capacity of children, and their power of understanding explanations of the operations of Nature, than is the case with school-books. The information lessons, accordingly, are limited to the description and explanation of familiar objects of manufacture, and of those natural phenomena which either fall within the province of observation, or which can be easily realized by the imagination. In the earlier volumes the instructive portions have almost exclusively in view the informing and cultivating faculties of the receptive and comparing capacities, the powers of reasoning and generalizing not being directly called into operation only in Books V. and VI., and in the "Advanced Reading Book." The graduation of the subject matter of the lessons is of great importance as the graduation of the language. Both require careful attention from the writer of books for the young."

"The Moral and Religious Instruction" has most wisely, we think, been conveyed to the young reader by means of biography, fable, and anecdote, rather than "by directly addressing the moral nature of children in injunctions or precepts," which injunctions or precepts will most undoubtedly and most naturally be passed over or neglected by young readers.

The poetical extracts are on the whole very well chosen, and many a gem, unknown even to fairly educated readers, is to be found scattered through the volumes of the series.

The object of the Three Parts of the First English Reading Book, an object to which the intrinsic value of the works thoroughly deserves.
Our first quotation is from the opening lines of the poem,—a specimen quite sufficient, we think, to arrest the attention of the reader:

Deep in the shade audibly the sound of rain,
Far smitten from the healthful breath of morn,
Far from the fiery noon, and eve's one star,
Slate grey-hair'd Saturn, quiet as a stone,
Still as the silence round about his land;
Forest on forest hung about his head
Like cloud on cloud. No stir of air was there,
Not so much as the rustling of the tree;
Robst not one light seed from the feather'd grass;
But where the dead leaf fell, there it did rest.

A stream runs, and saith the sickle of the deaden'd more
By reason of his fallen divinity
Shrinking a shade; the Naiad 'mid her reeds
Felt the touch of woe; she takes her ways to lips.

"Texitibus objectis latibus in valle profunda,
Qua non Aurorae flatus subiere salubres,
Non mediis soles, non vesperis unica lampas,
Circles and arcs, and broad-belting colure,
Glow'd through, and wrought upon the muffling dark.

The planet orb of fire whereon he rode
Each day from cast to west the heavens through,
Spun round in sable curtaining of clouds
Not therefore quitted, blindfold and hid;
But ever bright, grey-blobbed spheres,
Circles and arces, and braid-bod'ng cohere,
Glown'd through, and wrought upon the muffling dark.

Sweet-shaped lightnings from the nadir deep
Up to the zenith; hieroglyphics old,
Their wisdom long since fled.

Impositte sylvis circumdant tempora sylvte,
Mane recens, currum meta molitus utraque,
Press'd her cold finger closer to her lips.

"Flammigerum sed enim, quo se Deus invehit
Mente tenes memori ? Num lame tenuia verba
Nonsemplumante rapte leve semen ab herba.
Sic quasita diu species apparuit orbis :
Perlucent, tenebrisque tenerrima fulgura toto
Vertitur occlusum nebulis. Nec semper in atra
Relliquis lapidum deprensa, et marmore fusco ;
Numinis occasu ; gelidurnque arrecta labellis
Amnis ibi tacitus, sed jam taciturnior ibat,
Robs not one light seed from the feather'd grass ;

Numneque verba forem esse te desiderantem?
Tollite clamores, ululatus edite cuncti,
In the discussion of the idioms and constructions of the language, this grammar contains one novelty of importance, namely, the explanation of the precise uses of the relatives, 'that,' 'who,' and 'which.'

In the distribution of the idioms and constructions of the language, this grammar contains one novelty of importance, namely, the explanation of the precise uses of the relatives, 'that,' 'who,' and 'which.'

For in able one to write really good Latin poetry, an impossibility; for the brain which will enable, not only enable, but impel, him to excel in Latin quite worthy of the English (and we can suffixess, though all important in our language, the very hinges of composition,—are not numerous; their explanation can, therefore, be systematically given in a comparatively small space, which is done in the present work.

Similarly the meanings of the different moods and tenses of the verb are explained most fully.

So, too, with regard to Derivation, the meanings of all important prefixes and suffixes are stated. The analysis of sentences is also carefully worked out; and an attentive pupil will find little difficulty in unraveling the grammar of the most intricate sentence from such writers as Bacon and Swift.

A short but useful account of the English alphabet is prefixed. The subjects of Prosody, Figures of Speech, and Style, are reserved for the Author for a forthcoming manual of Rhetoric.

Mr. Bain's volume has also "its novelty," which we give in the Author's own words:—

"In the discussion of the idioms and constructions of the language, this grammar contains one novelty of importance, namely, the explanation of the precise uses of the relatives, 'that,' 'who,' and 'which.' The distinction between 'that' on the one hand, and 'who' and 'which,' on the other, was clearly perceived by our idiomatic writers up to the beginning of the last century; but owing to an unfortunately misapprehension as to the peculiar English idiom of throwing a preposition in the middle of a clause, the relatives 'that' and 'which' are now very little employed in book composition, 'who' and 'which' being made to serve in its stead.

We supplement this analysis of the contents of Mr. Bain's volume with a few quotations from his pages by way of example:—

"A' ar' an' is called the indefinite article; 'a' horse' means no one horse in particular. It gives
the species or kind of thing wanted, and leaves the choice of the individual free.

"The choice of the individual free." means give me an object of the species one, and has a meaning of its own, different from the numeral one, 'gives me an object of the species one, and implies that one is asked for, and not two or three. 'A horse, my kingdom for a horse,' is any horse, anything that is a horse.

"The singular, singular in meaning, is a sign of the singular number, and is used with all singular things (provided they are such as admit of the plural). Thus we do not say house, 'pen,' meaning I was so in my youth, and now I am so, but I was, and am, a-"'s prefixed to a proper name (e Mr. Brown), one of a class is meant (p. 33).

"The Perfect Tense." The Present Tense is (1) an action just finished, (2) an action done in a space of time not yet exhausted, (3) something whose consequences still remain. 1. 'I have sent the letter,' 'the messenger has come.' 2. 'I have finished my dinner; or Polypes, formerly divided into four orders, now contains only three, the fourth having been transferred to the sub-kingdom Mollusca. In the family of the Echinoidea, one genus (Strongylocentrotus) is transferred to the sub-kingdom Echinodermata.

The sub-kingdom Articulata is now, with some changes, termed Annelida, and contains eight classes. The additions consist of Entostraca, or intestinal worms; Turbellaria, or ciliated worms; Rotifers, or wheel animals; Myriapoda, many-footed creatures, such as the centipede. The sub-kingdom Mollusca now comprises, in addition to the former six classes, the Polyzoa, consisting of animals which had formerly been regarded as zoophytes. The animals belonging to the sub-kingdom Vertebrata were formerly distributed in four classes; they are now arranged in five, the Amphibia having been separated from the Reptilia. The fishes are still arranged according to Cuvier's classification; but a note showing the changes which the student can obtain.

"English Grammar for the use of the Junior Classes in Schools," By the Rev. William Kirkus, LL.B. (pp. 66.) London: Longman and Co. 1863.—This little volume will be found useful for your learners in schools where Latin is not taught, and it is taught, as many private schools are, with a view to teaching English children their own grammatical rules, and not the foreign language. The usefulness of this plan for our classical schools cannot be for a moment denied. That it has been successful, perhaps, in a highest sense, is due to the fact that comparatively few of the French Masters in England have a sufficient knowledge of Latin.

"The Desk-Book of English Synonymes," De. of Dr. Kalisch's "The Desk-Book of American Synonymes," is taught, we should say, "word and bread" for "bread and butter." Many of the "wrong phrases," too, are so transparently absurd, that no one can be supposed to have that of a costerman is likely to use them.

The book, however, take it for all and all, is probably the best of its size in our language, and is sure to profit the student who gives it an attentive perusal.

Introduction to Zoology, for the use of Schools. By Robert Patterson, F.R.S., Esq., President of the Natural History and Philo-

torical Society of Belfast. With upwards of 350 Illustrations, and a Glossary of Scientific Terms. By W. Solms and M. Lydeker. London: Longman and Co. 1863.—The value of this work has been proved by its steady and increasing sale from its first publication in 1846 down to the present day. The writer is thoroughly acquainted with his subject, and his style is very pensive and amusing. We cannot perhaps do better for our zoological readers than subjoin some of the principal changes which have been made in the new edition.

Our Library Table. Middle Class Atlas for Senior Students. By Walter McLeod, F.R.G.S. Middle Class Atlas for Junior Students. By Walter McLeod, F.R.G.S. London: Longman and Co. 1863.—These Atlases have been expressly prepared for the Cambridge Local Examinations. They render the maps required for the examination section of the examination, and particular attention has been paid to the points on which candidates are required to be specially prepared, such as the courses of the rivers, and the boundaries of kingdoms, provinces, &c. The maps, which are remarkably clear and distinct, have been brought up to the present date, so as to include the recent political changes in the boundaries of France, Sardinia, Austria, and the States of the Church. A Grammar of the French Language. Second Part. Syntax. By the Rev. and Master in the Classical Department of Cheltenham College. London: Trübner and Co.; New York: D. Van Nostrand. 1863.—In this second part M. Van Luyn continues to establish, wherever possible, a connexion between the French and Latin languages. The usefulness of this plan for our classical school cannot be for a moment denied. That it has been successful, perhaps, in a highest sense, is due to the fact that comparatively few of the French Masters in England have a sufficient knowledge of Latin.

English Grammar for the use of the Junior Classes in Schools. By the Rev. William Kirkus, LL.B. (pp. 66.) London: Longman and Co. 1863.—This little volume will be found useful for your learners in schools where Latin is not taught, and it is taught, as many private schools are, with a view to teaching English children their own grammatical rules, and not the foreign language. The usefulness of this plan for our classical schools cannot be for a moment denied. That it has been successful, perhaps, in a highest sense, is due to the fact that comparatively few of the French Masters in England have a sufficient knowledge of Latin.

The Civil Service Arithmetic, containing One Thousand Three Hundred Questions proposed to the Civil Service Commissioners, with Solutions of the most difficult. By W. Kirkus, A.R.G.S. London: Longman and Co. 1863.—The Civil Service Examination consists of a test of an applicant's knowledge, and of his ability to apply that knowledge to the work. As a guide to the questions or answers in the Civil Service Examination, the standard of difficulty is to be found in the volume. The author has made the questions set in the Civil Service Examinations the basis of his work. To the guide to the questions properly so stated, as well as to the solutions, the present work will prove very acceptable to the large class of persons qualifying for appointment in the public service.

Selections for Reading and Recitation. Will be found in the "Author's Selected Works," by M. Wilson, Principal of the Glasgow High Schools. Matthew Wilson and Co. 1863.—The author is an instructor in the Latin and Greek, and has been for the last quarter of a century have been connected with this class of education. The author has made the questions set in the Civil Service Examinations the basis of his work. To the guide to the questions properly so stated, as well as to the solutions, the present work will prove very acceptable to the large class of persons qualifying for appointment in the public service.
Mathematical Questions and Solutions.

1387 (Proposed by Mr. W. K. Clifford, London.)—Four common tangents are drawn to a circle and an ellipse passing through the centre of the circle. The poles of the common tangents are equally inclined to the tangent at O to the ellipse.

Solution by A. Cayley, F.R.S., Sedleian Professor of Pure Mathematics in the University of Cambridge.

The elegant theorem 1387, stated and proved by Mr. W. K. Clifford in the Educational Times for September, is included as a particular case in the known theorem, "given three conics inscribed in the same quadrilateral, the tangents from any point to these conics form a pencil in involution." In fact as follows viz., Four common tangents are drawn to a circle and an ellipse which passes through the centre O of the circle; if A, B be opposite intersections of the common tangents, then OA, OB are equally inclined to the tangent at O to the ellipse.

This comes to saying that the tangent at O to the ellipse, say OT, is the double or bi-conjugate line of the involution of the pencil formed by the lines OA, OB, and the line OJ, OJ drawn from O to the circular points at infinity; and if we replace the circle by an arbitrary conic S, and the line infinity by an arbitrary line l, the theorem will be as follows.

Consider a conic S; a line meeting this conic in the points I, J; and the point O, the intersection of the tangent at I to the conic S is the same thing as the pole of the line l in regard to the conic.
Let \( c \) be the cosine of the inclination of the
particle to the vertical, and \( CD = \frac{1}{2} \text{get}, \text{ t being the}
given time of descending through \( CD \) is given: hence the perpen-
dicular distance (OQ) of O from PE is given, which determines the
point \( O \).

Solution by Mr. J. Wilson; and the Proposed.

1431 (Proposed by Thomas Dobson, B.A.,
Head Master of the Royal Grammar School,
Hoxham.)—Of four given points in a circle it is
known that every three may be taken as the in-
tersections of tangents to a parabola, of which the
fourth is the focus. Prove that the tangents at
the vertices of the parabolas thus described intersect in a
point, such that the sum of the
squares of its distances from the four given points
is equal to the square of the diameter of the circle.

Solution by the Proposed.

Let \( ABCD \) be a quadrilateral figure in a circle
in which \( Q \) is the centre; \( A'B'C'D' \) the inter-
sections of the perpendiculars of the triangle
\( BDC, ACD, ABD, \) and \( ABC \) respectively.
Draw \( DA, DB \), \( GR \) perpendicular to \( BC \).
It is known that the circles through the feet of the
perpendiculars of the triangle \( ABC \) passes through
\( B, R, C, D, \) and has its centre at the middle
point of \( PQ \).
Hence \( AD' = SQR = A'D' ; \) and
\( A'D' \) and \( A'D' \) are parallel lines. Similarly \( AC' \) is
equal and parallel to \( AC' \) and \( OQ \) is parallel to
\( A'B'C', A'C'B', B'C'D', C'D'B' \) are parallel lines of which the diago-
als all pass through \( O \), the intersection of
\( AA' \) and \( DD' \).

The figure \( A'B'C'D' \) is evidently identical
with \( ABCD \) on the sides of the triangle \( BCD \), and from \( P \) to
those of \( B' \), their feet will lie in a straight
line through \( O \); and this holds also when
when the perpendiculars are drawn to corresponding lines for
\( B \) and \( C \).

But the line \( abc \) is the tangent at the vertex
of the parabola of which \( D \) is the focus, and \(a \) and
\( b, B, C, \) are tangents; and the straight
lines through \( O \), which are the feet of the
perpendiculars from \( A, B, C, \) respectively, at
the tangents at the vertices of the three other
cognate parabolas. Hence the tangents to the
vertices of the four parabolas pass through
the point \( O \).

Since \( D \) and \( D' \) are equally distant from \( a, a' \) it follows
that the directrix corresponding is in\( \) the
focus \( D \) passes through \( D' \).

Now \( AD = 2QR, \) and if \( BQ \) be produced
meet the perpendicular from \( C \) in \( S, \) \( C_S - 2QR \)
= \( AD', \) and \( BS = \text{the diameter (D)} \).
Also \( AD'' = D''B'C' ; \)
and \( 2AD'' + 2D'O = AD'' + AD' ; \)
\( A''D'' + 2D'O = D''B'O + AD'' ; \)
this, with three corresponding expressions \( \text{giving } \)
\( BO, CO, \) gives, by adding,
\( A''O + B''O + C'O + D'O = D' \).

Solution by the Proposed.

1. Let \( (C) \) represent the primitive curv.

2. Let \( (C) \) represent the primitive curv.

3. Let \( (C) \) represent the primitive curv.

4. Let \( (C) \) represent the primitive curv.

If we further denote by \( dx \) the arc of the cir-

ce, around the origin, the intercepted between
diagonals of two \( B, C, \) the points \( b, b, c, \) \( c \) are
identically equal, and their equal parallels
diagonals of which the diago-
nals all pass through \( O \), the intersection of
\( AA' \) and \( DD' \).

The figure \( A'B'C'D' \) is evidently identical
with \( ABCD \) on the sides of the triangle \( BCD \), and from \( P \) to
those of \( B' \), their feet will lie in a straight
line through \( O \); and this holds also when
when the perpendiculars are drawn to corresponding lines for
\( B \) and \( C \).

But the line \( abc \) is the tangent at the vertex
of the parabola of which \( D \) is the focus, and \(a \) and
\( b, B, C, \) are tangents; and the straight
lines through \( O \), which are the feet of the
perpendiculars from \( A, B, C, \) respectively, at
the tangents at the vertices of the three other
cognate parabolas. Hence the tangents to the
vertices of the four parabolas pass through
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= \( AD', \) and \( BS = \text{the diameter (D)} \).
Also \( AD'' = D''B'C' ; \)
and \( 2AD'' + 2D'O = AD'' + AD' ; \)
\( A''D'' + 2D'O = D''B'O + AD'' ; \)
this, with three corresponding expressions \( \text{giving } \)
\( BO, CO, \) gives, by adding,
\( A''O + B''O + C'O + D'O = D' \).

Solution by the Proposed.

1. Let \( (C) \) represent the primitive curv.

2. Let \( (C) \) represent the primitive curv.

3. Let \( (C) \) represent the primitive curv.

4. Let \( (C) \) represent the primitive curv.
\[ A_1 = \int_0^\beta \cos a \; da, \quad A_2 = \int_0^\beta \sin a \; da, \]
\[ A_{11} = \int_0^\beta \cos^2 a \; da, \quad A_{12} = \int_0^\beta \sin a \cos a \; da, \]
\[ A_{22} = \int_0^\beta \cos^2 a. \]

dependent only on the position of the origin \( O \), and on the curvature of the primitive curve. The integration in each case is, of course, to be extended to all points of the primitive curve.

2. The above formula, by means of which the area of any Pedal (\( P \)) may be found when the areas of any other (\( P' \)) is known, shows at once that the locus \(( A)\) of the origin \( A \) of a Pedal of constant area is a conic, and that such loci constitute a system of similar, similarly placed, and congruent conics, the common centre of the loci being the point at which the integrals \( A_{11}, A_{12}, A_{22} \) vanish. If we suppose the origin of our coordinate axes to coincide with this point, the equation of the locus (\( A)\) may be written

\[ P = P_0 + \frac{1}{2} \left( \cos a + \gamma \cos 2a \right) \frac{d \theta}{d \varphi}, \]

whence we learn that the common centre of all the quadric loci (\( A)\) is the origin of the Pedal of least area.

3. Let us consider, in the next place, the Pedals of a primitive arc containing a point of inflexion and having parallel normals at its extremities. The normals along such an arc will consist of pairs of like-directed parallels; but in passing from one extremity to the other the sign of the Jacobian will change, so that the integrals \( A_{11}, A_{12}, A_{22} \) will each consist of equal and opposite elements and vanish in consequence. In this case, the locus \(( A)\) of equal Pedal ordinates coincides with the straight line

\[ P = P_0 - \frac{1}{2} \gamma \cos ^2 a \]

whence we learn that the common centre of all the quadric loci (\( A)\) is the origin of the Pedal of least area.

4. If the primitive be a closed curve, but otherwise perfectly arbitrary, we may always conceive it to consist of arcs (\( C)\) of the kind considered in Art. 3, and of other arcs (\( C)\) the directions of whose normals represent exactly all possible directions round a point. But it has already been shown that for every arc (\( C)\) the integrals \( A_{11}, A_{12}, A_{22} \) vanish, and it is easy to see that, extended over the arc (\( C)\), these integrals have the values

\[ A_{11} = A_{12} = 0, \quad A_{22} = \pi, \]

where \( n \) represents the number of such arcs, in other words, the number of convolutions of the primitive curve. In this case, therefore, the equation of Art. 2 becomes

\[ P = P_0 + \frac{1}{2} \gamma \cos ^2 a \]

and for constant values of \( P \) represents a circle around the origin of the least Pedal.

5. In order to illustrate by an example what is meant by the area of a Pedal, let us consider the case of an ellipse with the semi-axes \( a, b \). The focal Pedal, as is well known, is a circle whose diameter is the major axis; so that, putting for \( P, \; a, \; b \) the values \( a^2, 1, \; a^2 - b^2 \) respectively, we find, for the area of the central Pedal, the value

\[ P_0 = \pi \left( a^2 + b^2 \right). \]

equal to the area of the semicircle whose radius is the line joining the extremities of the axes; and the area of the entire Pedal is

\[ P = \pi \left( a^2 + b^2 + c^2 \right). \]

For the circle \( a = b \), we have

\[ P = \pi \left( a^2 + b^2 \right), \]

which clearly represents the sum of the areas of the two loops of which the Pedal consists when its origin is without the circle. When \( a \) vanishes, the circle is well known to be the circle on \( r \) as diameter. Our last formula shows, however, that we must conceive this circle to be doubled. A glance at the expressions for \( P \) and \( dP \) in Art. 1 explains this distinctive feature of Pedal areas. It will be there seen that the sign of the increment \( dP \) does not depend upon that of \( p \), which latter changing according as the Pedal origin lies on one or the other side of the tangent. We in fact consider the area of a Pedal to be the space swept by the perpendicular as the point of contact of the tangent describes the primitive arc.

\[ \text{[We have taken the foregoing investigation from a very interesting paper by Dr. Hirst ("On the volumes of Pedal Surfaces") recently published in the Philosophical Transactions.]} \]

1. **First Solution.**—Let the perpendicular from \( S \) meet the tangent at \( P \) in \( T \), and let \( TP \) cut \( SC \) in \( E \); then

\[ CE : CM = CP : CX : CS; \]

\[ CE : CS = CX : CM; \]

\[ CE : SE = CP : ST; \]

\[ CX : MX = OL : M Q; \]

\[ CP : ST = OL : M Q; \]

\[ CP = CL, \]

therefore \( ST = MQ \).

2. **Second Solution.**—Let \( a^2 + b^2 = a^2 \) be the equation of the circle, and \( (c, \alpha) \) the coordinates of \( S, P \); then the length of the perpendicular (\( ST \)) from \( (c, \alpha) \) on the tangent at \( P \) is

\[ ST = \frac{ax + \alpha^2}{a}; \]

also \( MQ = a \left( \frac{
\alpha}{a} \right) \frac{ax + \alpha^2}{a} \)

\[ \therefore ST = MQ \]

1. **First Solution.**—It is a well-known and general property of conics that four fixed tangents cut any fifth tangent in points whose anharmonic ratio is constant. Now a parabola has one tangent at infinity; and thus the intercepts of a variable tangent, made by three fixed tangents to a parabola, have to one another a constant ratio. By supposing the variable tangent to coincide successively with the three fixed tangents \( PRT, RVS, TSV \), we obtain the theorem

\[ PR : RT = RS : TS \]

\[ TV = VT \]

\[ PR : RT = RS : TS \]

\[ TS = SV \]

\[ ST = MQ \]

\[ \therefore ST = MQ \]

1. **First Solution.**—The motion of a point in a parabola whose focus is \( F \), under the action of a constant force, may be regarded as the limiting case of the motion in an ellipse whose foci are \( F \) and \( H \), infinitely remote from \( P \), under the action of a force varying inversely as the square of the distance from \( H \). Hence, by the doctrine of central forces, the velocity at any point is inversely as the focal distance of its tangent from \( H \), that is directly as the focal distance from \( F \). But it is shown in Art. 7 of the Solution of Quest. 1402 \( (\text{Educational Times for September}) \), also by mechanical reasoning, that the velocities at any two points of the parabola, regarded as a trajectory under a constant force, are in the proportion of the segments of the tangents at these points, as limited by each other; hence these latter are as the triangles \( PMF, PTN \), and thus the triangles \( TPF, TQF \) are similar, as are also the triangles \( PMF, PTN \), therefore \( TP = TF \); also \( PF : FM = TF : FN \); therefore \( TP = TQ = FM, FN \), which proves the theorem.

3. **Or, again:**

\[ \Delta TPF : TQF = \tan \theta : \tan \phi \]

\[ \therefore TP = FM : TQ, FN \]

\[ \therefore TP = TF : TQ = FM : FN \].
2. Or again, \(PT = \Delta PVT\), \(RT = \Delta RVT\), \(QS = \Delta TVQ\), \(TS = \Delta ATS\), \(ST = \Delta STS\), \(RS = \Delta RSV\), \(RV = \Delta RVV\), \(SV = \Delta VSV\).

3. Second Solution.—Taking the tangents \(TQ, TP\) as axes, let the points \(P, Q, V, Z, B\) be \((0, c), (c, 0), (f, g), (b, h)\); then the respective equations of the parabola \(PQV\), the third tangent \(RYS\), the chord of contact \(P'ZQ\), and the secant \(TVZ\), are

\[
\sqrt{a} + \sqrt{c} + 1 = \ldots \ldots (1)
\]

\[
\sqrt{x} + \sqrt{y} + 1 = \ldots \ldots (2)
\]

\[
\sqrt{a} + \sqrt{c} + 1 = \ldots \ldots (3)
\]

From (1), (4), and (8), (4) we have

\[
\sqrt{a} = \sqrt{u} \cdot \sqrt{v} + \sqrt{w} = \frac{u + v}{w}.
\]

Also (2) gives \(TR = \sqrt{c}(c)\),

\[
PX = c - k = \frac{c}{k}
\]

\[
RQ = \sqrt{c}(c) - g = \frac{1}{\sqrt{w}}
\]

\[
R = \sqrt{c}(c) - g = \frac{mx - n}{w}
\]

\[
QZ = RV = VS = v = \frac{mx - n}{w}
\]

GEOMETRICAL SOLUTIONS.

4.157 (Proposed by R. Palmer, M.A.)—Show how a given point can be marked by a straight line drawn through a given point without it.

4.158 (Proposed by R. Tucker, M.A., Port- arlington.)—If the radius of a curve of a given curve be known, show how to find the radial curve of its inverse, and the equation of the nth Pedal of the conic

\[
B_1 T = \frac{A_1 T}{c_1}, B_2 T = \frac{A_2 T}{c_2}, \ldots B_m T = \frac{A_m T}{c_m}
\]

Find the position of a point \(P\) so that, drawing \(FT_1, FT_2, \ldots FT_n\) and \(F_1 T_2, F_2 T_3, \ldots, F_n T_1\), we may have

\[
F_1 T_2 F_2 T_3 \ldots F_n T_1 = AB^n
\]

A geometrical solution is required.

4.159 (Proposed by W. K. Clifford, Trinity College, Cambridge.)—Three elastic strings without weight, whose natural lengths are \(OA, OB, OC\), are joined together at \(O\), the centre of the circumscribing circle of the horizontal triangle \(ABC\) and a smooth sphere of given radius and weight is placed with its centre vertically above \(O\) and allowed to descend until the centre rests at \(O\). Find the moduli of elasticity in the three strings.

4.160 (Proposed by W. J. Miller, B.A., Mathematical Museum, Huddersfield College.)—Give a simple proof of the parallelogram of forces.

ADDRESS ON EDUCATION, BY MR. NASSAU SENIOR.

(Read before the Social Science Association.)

We publish this month a full report of the Address of Mr. Senior, President of the Educational Department of the Social Science Association, read before the recent Meeting at Edinburgh. Mr. Senior touches in his address upon most of the questions which are at this moment engaging the attention of the friends of education throughout the country:

It appears to me that the duty of the President of the Educational Department of this Association is not so much to set forth the theories or principles of his own, as to give a general outline of the whole subject of education, to distribute it into its many sub-divisions and cross-divisions, and to endeavour to point out the question to which each of them should be addressed. The first question, I have no doubt, is the importance, their novelty, or their urgency, most deserve or require your attention. The second branch of education is training—let me say, the creation of habits, and by some it is indeed a word not easy of definition. It is, to a great extent, the action of the friends of education throughout the country:

Bodily training. Mental training.

Bodily training.

In its narrower sense, the sense in which it is proposed as the subject of your discussion, it is the question to which each of them should be addressed. The first question, I have no doubt, is the importance, their novelty, or their urgency, most deserve or require your attention. The second branch of education is training—let me say, the creation of habits, and by some it is indeed a word not easy of definition. It is, to a great extent, the action of the friends of education throughout the country:

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Bodily training.

In its narrower sense, the sense in which it is proposed as the subject of your discussion, it is the question to which each of them should be addressed. The first question, I have no doubt, is the importance, their novelty, or their urgency, most deserve or require your attention. The second branch of education is training—let me say, the creation of habits, and by some it is indeed a word not easy of definition. It is, to a great extent, the action of the friends of education throughout the country:

Bodily training.
temptation. As between teaching and training, more important. It is the more important even be forgotten, and requires some trouble to keep it permanent. And even the knowledge which has been be recovered by a man of good intellectual habits.

Moral training is obviously still more important than intellectual training; and even bodily training, inferior as it is to the latter, is required to be exercised by almost every child of a community. The second comprehends the labouring classes. The third the paupers. The educational labour of the latter is less burdensome to the State.

From the consideration of the nature of education, I proceed to that of the persons to whom it is to be given. I will consider the two, with respect to their means of paying for it. So con-

1. The first comprehends the children whose parents or friends can afford to pay the whole ex-

2. The second, those whose parents or friends can afford to pay a portion of that expense. 3. The third, those whose parents or friends cannot afford to pay any part of it. The first group comprehends the higher and middle classes of a community. The second comprehends the labouring classes. The third the paupers. The educational labour of the latter is less burdensome to the State.

3. The first comprehends the children whose parents or friends can afford to pay the whole ex-

3. The third, those whose parents or friends cannot afford to pay any part of it. The first

tends on the voluntary system—that is to say, almost every such State allows them to do so. A pauper is, by the definition of the word, a person who cannot provide for his children the necessities of life. Those necessary for the maintenance of the State. They are the children of the State. She stands to them

loco parentis. Is education one of those necessa-

ries ? I firmly believe that you will all agree with me that it is a matter of the utmost importance to the State whether a pauper child, has assumed all the responsibilities and the extent to which the State ought to inter-

The existing law gives to the Board of Guar-

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by the definition of the word, a person who cannot provide for his children the necessities of life. Those necessary for the maintenance of the State. They are the children of the State. She stands to them

loco parentis.
I do not regret to see them again proposed to us. Under the words "Compulsory Half-time Education" is, I presume, comprehended not only the protection and education of children employed in business now regulated by law, but also the protection and education of children employed in business which at present are not so regulated. Recognition by the Legislature that children have rights, and that among those rights is education, begun in the centre of the class schools. Of the training in such schools we have some evidence as to their incompetency. Sir John Shaw Lefevre, in the address which he delivered to this Department in 1861, describes the state of knowledge of the candidates that came before him for examination for the civil service. After noticing the ignorance on elementary subjects of the candidates from the labouring classes—an ignorance which I hope that the new code promulgated by the Privy Council will remove, he adds:-

"By a step a little higher in the scale, to the junior appointments in the civil service which are filled up from the middle classes, I cannot say that the examinations show a better proportionate result. If I may make use of the analogy of graphy, the miserable writing, the ignorance both of the elementary theory and practice of arithmetic. It is comparatively rare to find a candidate who can figure, so to speak, his chronological age, add correctly a moderately long column of figures, and many do not understand common notation so as to write down in figures a number described in words. When the examination extended to English, Latin or history, the performances of some of the candidates are poor beyond belief; and we are under the necessity of keeping the standard very low, in order to prevent the examination from being a false guide, which would arise from an indiscriminate rejection." Such are the results of the teaching in middle-class schools. Of the training in such schools we know nothing. Is it not likely to be much worse? The first step towards a remedy for this lamentable state of things is to know accurately the amount and the causes of the evil. And for that purpose I would suggest to the Association that the Crown issue a commission to inquire into the present state of the education of the middle classes in the British Islands, and to consider and report what measures, if any, are required for the extension of sound education to those classes. I do not believe that, unless we improve that education, we shall be able to continue to make large annual grants of public money for the maintenance of the schools of the lower classes. The middle classes bear the greater part of the taxation of the empire, and pay, therefore, the greater part of the public money expended on education. Will they long consent to an expenditure from which they alone receive no benefit? Will the English farmer contentedly see his landlady's children being educated at the public expense and university, and his labourer's son educated, perhaps still better, in a national school, to the expense of which the labourer contributes only one-third, while the farmer himself must put up with a far inferior school, and pay to it twenty times as much. With respect to general elementary education, the program invites papers on the following subjects: -

- The Educational System—The Principle of Supporting Schools by Local Rates—Factory Schools—Compulsory Half-time Education—Union Schools—Ragged and Feeding Schools—Agricultural and Industrial Training as an Element in School Instruction—The Combination of Physical with Mental Training—The Functions of the Primary School—The Secretaryship of the Education Association. This subject of these subjects have been already discussed by this Association. But they are all so important, and many of them are so difficult, that

- has been utterly neglected. Has this neglect been occasioned by a belief, at least a reasonable belief, that it less requires inquiry? That its defects are likely to be fewer, or smaller, or better known? Conside the masters and mistresses of the elementary schools in Ireland and the Privy Council schools carry their testimonials and to annual reports. So are all the factory concerns, we have some evidence as to their incompetence. Sir John Shaw Lefevre, in the address

- the state of knowledge of the candidates from the labouring classes—an ignorance which I hope that the new code promulgated by the Privy Council will remove, he adds:-

"By a step a little higher in the scale, to the junior appointments in the civil service which are filled up from the middle classes, I cannot say that the examinations show a better proportionate result. If I may make use of the analogy of graphy, the miserable writing, the ignorance both of the elementary theory and practice of arithmetic. It is comparatively rare to find a candidate who can figure, so to speak, his chronological age, add correctly a moderately long column of figures, and many do not understand common notation so as to write down in figures a number described in words. When the examination extended to English, Latin or history, the performances of some of the candidates are poor beyond belief; and we are under the necessity of keeping the standard very low, in order to prevent the examination from being a false guide, which would arise from an indiscriminate rejection." Such are the results of the teaching in middle-class schools. Of the training in such schools we know nothing. Is it not likely to be much worse? The first step towards a remedy for this lamentable state of things is to know accurately the amount and the causes of the evil. And for that purpose I would suggest to the Association that the Crown issue a commission to inquire into the present state of the education of the middle classes in the British Islands, and to consider and report what measures, if any, are required for the extension of sound education to those classes. I do not believe that, unless we improve that education, we shall be able to continue to make large annual grants of public money for the maintenance of the schools of the lower classes. The middle classes bear the greater part of the taxation of the empire, and pay, therefore, the greater part of the public money expended on education. Will they long consent to an expenditure from which they alone receive no benefit? Will the English farmer contentedly see his landlady's children being educated at the public expense and university, and his labourer's son educated, perhaps still better, in a national school, to the expense of which the labourer contributes only one-third, while the farmer himself must put up with a far inferior school, and pay to it twenty times as much. With respect to general elementary education, the program invites papers on the following subjects: -

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their attainments are higher, and they give a higher tone to the school. Mr. Spence, the master of the school, declares that any master who has once experienced the benefits of the system will be very unwilling to forego them. This alternate system of labour and rest appears to be indicated by our nature, in which the activity of the mind, and every hard-working professional man has found that the best rest for his over-tasked mind is in bodily exertion.

On the other subject to which Mr. Chadwick's attention was directed—the shortening the periods of mental labour imposed on children—still more important information was collected. Its result is summed up by the Royal Commissioners:

"I. That for children under the age of twelve years, twenty-four hours a-week is nearly the limit of profitable instruction in studies requiring mental effort. II. That eighteen hours a week is often a more useful period of mental effort than twenty-four.

III. That fifteen hours a week, the utmost that is obtained by the factory children, is, to use the most unflavourable expression, not insufficient. IV. That much may be done in twelve hours a-week, or two hours a-day, provided that those two hours be dispensed with in the morning. That children who have been educated up to the age of seven in a good infant school can be taught in three years, in a school attendance from fifteen to eighteen hours a week. That the wrongs which had been imputed to the Commission were more effectual than those previous ones. He concluded by expressing his thanks to Mr. Senior for his lecture.

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