years older than himself, to run away that they might enlist as hussars in the Prussian army. They managed to reach Hamburg just when the Seven Years' War was commencing, and were allowed to enter a regiment. But the elder brother soon got tired and ran away, while the poet, after a series of extraordinary adventures, deserted to the Austrian army, where from being drummer he rose to being sergeant, and was only not made an officer because he was a Protestant. In 1760 he was weary of a soldier's life, and deserted again, getting safe back to Denmark. For the next two years he worked with great diligence at the university, but the Arense for whom he had gone through so much hardship and taken so much pains married another man almost immediately after Ewald's final and very successful examination. The disappointment was one from which he never recovered. He plunged into dissipation of every kind, and gave his serious thoughts only to poetry. In 1763 his first work, a perfunctory dissertation *De Pyrologia Sacra*, first saw the light. In 1764 he made a considerable success with a short prose story, *Lykkens Tempel* (The Temple of Fortune), which was translated into German and Icelandic. On the death of Frederick V., however, Ewald first appeared prominently as a poet; he published in 1766 three *Elegies* over the dead king, which were received with universal acclamation, and of which one, at least, is a veritable masterpiece. But his dramatic poem *Adam og Eva* (Adam and Eve), by far the finest imaginative work produced in Denmark up to that time, was rejected by the Society of Arts in 1767, and was not published until 1769. At the latter date, however, its merits were perceived. In 1770 Ewald attained success with *Philet*, a narrative and lyrical poem, and still more with his splendid *Rolf Krage*, the first original Danish tragedy. For the next ten years Ewald was occupied in producing one brilliant poetical work after another, in rapid succession. In 1771 he published *De brutale Klappers* (The Brutal Clappers), a tragi-comedy or parody satirizing the dispute then raging between the critics and the manager of the Royal Theatre; in 1772 he translated from the German the lyrical drama of *Philemon and Baucis*, and brought out his comedy of *Harlequin Patriot*, a satire on the passion for political scribbling created by Struensee's introduction of the liberty of the press. In 1773 he published *Pebersvendene* (Old Bachelors), a comedy. In 1771 he had already collected some of his lyrical poems under the title of *Adskilligt af Johannes Ewald* (Miscellanies). In 1774 appeared the heroic opera of *Balder's Död* (Balder's Death), and in 1779 the finest of his works, the lyrical drama *Fiskerne* (The Fishers), which contains the Danish National Song, "King Christian stood by the high Mast," his most famous lyric. In the two poems last mentioned, however, Ewald passed beyond contemporary taste, and these great works, the pride of Danish literature, were coldly received. But while the new poetry was slowly winning its way into popular esteem, the poet did not lack admirers, and at the head of these he founded in 1775 the Danish Literary Society, a body which became influential, and which made the study of Ewald a cultus. But the poet's health had broken; when he was writing *Rolf Krage* he was already an inmate of the Consumptive Hospital, and when he seemed to be recovering, his health was shattered again by a night spent in the frosty streets. He embittered his existence by the recklessness of his private life, and finally, through a fall from a horse, he ended by becoming a complete invalid. His last ten years were full of acute suffering; his mother treated him with cruelty, his family with neglect, and but few even of his friends showed any manliness or generosity towards him. In 1774 he was placed in the house of an inspector of fisheries at Rungsted, where Anna Hedevig Jacobsen, the daughter of the house, tended the wasted poet with infinite tenderness and skill. He stayed in this house for three years, and wrote there some of his finest later lyrics. Meanwhile he had fallen deeply in love with the charming solace of his sufferings, and won her consent to a marriage. This step, however, was prevented by his family, who roughly removed him to their own keeping near Kronborg. Here he was treated so infamously that he insisted on being taken back to Copenhagen in 1777, where he found an older, but no less tender nurse, in Madame Schouw. Here he wrote *Fiskerne*, with his imagination full of the familiar shore at Hornbæk, near Rungsted. In 1780 he was a little better, and managed to be present at the theatre at the first performance of his poem. But this excitement destroyed him, and after months of extreme agony, he died on the 17th of March 1781, and was carried to the grave by a large assembly of his admirers, since he was now just recognized by the public for the first time as the greatest national poet. Among his papers were found fragments of three dramas, two on old Scandinavian subjects, entitled *Frode* and *Helgo*, and the third a tragedy on the story of *Hamlet*, which he meant to treat in a way wholly distinct from Shakespeare's.

Ewald belongs to the race of poetical reformers who appeared in all countries of Europe at the end of last century; but it is interesting to observe that in point of time he preceded all of them. He was born six years earlier than Goethe and Alfieri, sixteen years before Schiller, nine years before André Chénier, and twenty-seven years earlier than Wordsworth, but he did for Denmark what each of these poets did for his own country. Ewald found Danish literature given over to tasteless rhetoric, and without art or vigour. He introduced vivacity of style, freshness and brevity of form, and an imaginative study of nature which was then unprecedented. But perhaps his greatest claim to notice is the fact that he was the first person to call the attention of the Scandinavian peoples to the treasuries of their ancient history and mythology, and to suggest the use of these in imaginative writing. With a colouring more distinctly modern than that of Collins and Gray, his lyrics yet resemble the odes of these his English contemporaries more closely than those of any Continental poet; from another point of view his ballads remind us of those of Schiller, which they preceded. His dramas, which had an immense influence on the Danish stage, are now chiefly of antiquarian interest, with the exception of "The Fishers," a work that must always live as a great national poem. In personal character and in fate Ewald seems to have been not unlike Heinrich Heine.

The first collected edition of Ewald's works began to appear in his life-time. It is in four volumes, 1780–1784. They have constantly been reprinted, but the standard edition is that by Liebenberg, in 8 vols., 1850–1855. (E. W. G.)

EWING, Alexander (1814–1873), a clergyman of the Scotch Episcopal Church, bishop of Argyll and the Isles, was descended from an old Highland family, and was born in Aberdeen 25th March 1814. After spending two sessions at the university of that city, where he manifested a special bent towards the study of natural history, he studied for a time at a private school in Chelsea, and in 1831 he attended the classes of chemistry, natural philosophy, and natural history in the university of Edinburgh. His uncertain health, however, compelled him for a time to suspend all systematic study. The property inherited from his father rendered it unnecessary for him to adopt a profession from pecuniary considerations, and his delicate health counselled at least delay in taking such a step. Accordingly, for some time after his marriage he occupied himself chiefly in the cultivation of his literary and artistic tastes, residing at first in the north of Scotland, and in October 1838 journeying to Italy,

where he remained till April 1841. As early as 1836, however, he had begun to look to the church as a profession; and in October 1838 he was admitted to deacon's orders with the object of pledging himself to his future profession before leaving Scotland,—the Episcopalian Church being preferred by him to the Presbyterian, chiefly on account of its comprehensive statements regarding the subject of human redemption. Soon after his return from Italy he was requested to take the charge of the Episcopal congregation at Forres, and on accepting it he was ordained a presbyter in the autumn of 1841. He remained at Forres till 1846, when he was elected first bishop of the newly restored diocese of Argyll and the Isles, the duties of which position he discharged till his death, 22d May 1873. In 1851 he received the degree of D.C.L. from the university of Oxford.

Though the work accomplished by Ewing was necessarily modified and circumscribed by the fact that throughout his whole life he was fettered by a delicate bodily constitution, he yet battled with the vices and religious perplexities and difficulties of his time in a spirit of buoyant cheerfulness. Perhaps his strength lay chiefly in the charm of his personal manner, in his fine tact, and his catholic sympathies; and these gradually secured him, not only the admiration and love of the people and clergy of his diocese, but a prominent position among the ecclesiastics of his own time, both in Scotland and England. In all theological discussions he contended for the exercise of a wide tolerance and charity, shrinking from condemning with ecclesiastical censure even opinions which he feared might be fraught with evil and danger to the church. He did not, indeed, attach much importance to mere ecclesiastical authority and organization, and was more solicitous about the inward than the outward unity of Christianity. His own theological position resembled very closely that of Thomas Erskine of Linlathen, and Frederick Denison Maurice; but his relation to these theologians was rather that of a friendly sympathizer than a disciple, for his opinions were the fruit of his own meditation, and were coloured by his own idiosyncracy, and their perspective was determined by his individual stand-point. Unlike theirs, his teaching was never presented in the form of a complete and elaborate theological treatise, and its purport is only to be gathered from fragmentary publications,—letters to the newspapers, pamphlets, special sermons, essays contributed to the series of *Present Day Papers*, of which he was the editor, and a volume of sermons entitled *Revelation considered as Light*, which he only lived to see through the press. The title of this volume may be taken as indicating the characteristic feature of his theology. He dwelt specially upon the illuminating power of Christianity as revealing the fatherhood of God, and thus "rolling back the clouds of human sin and sorrow," so as even ultimately to "exhaust hell of its darkness." To him each attribute of God was equally light, and therefore he did not believe that any compromise had ever been effected between them. Christ was the supreme manifestation of that light, and the Bible was but the medium of its revelation, the means for enabling it to stream in upon the soul from sources beyond the mere letter of the truths which the written word contained. One of the chief of these external sources of light, specially welcomed by Ewing, was science, to the discoveries of which he looked forward as destined to lead to the manifestation of other and higher aspects of Christianity than were yet fully realized.

Besides his strictly theological writings, Ewing is the author of the *Cathedral or Abbey Church of Iona*, 1865, the first part of which contains drawings and descriptive letterpress of the ruins by Messrs Bucklers, architects, Oxford, and the second a history of the early Celtic church and of the mission of St Columba. See *Memoir of Alexander Ewing, D.C.L.*, by A. J. Ross, B.D., 1877.

EXAMINATIONS. Examinations have lately come very widely into use, and call for consideration at once as educational appliances and as tests of proficiency. Something answering to examinations must enter into all effectual instruction; for in order that the pupil may gain solid advantage it is not enough that what he ought to know should be put before him—as by giving him a book, or by making him listen to lectures—but we must also see that he gets hold of it and understands it aright; this is the function of examinations as appliances for education. They have, however, another use, that of tests or instruments for selection, and this purpose may clash with the educational purpose. But though the examiners may have one purpose primarily in view, and may lay down their scheme with especial reference to it, we must bear in mind that the examination must act in both ways at once. Some sort of advantage must attend on success, or else candidates will not work for it; and, on the other hand, though an examination may only be intended to sift out the ablest, and pains may be taken to avoid giving any advantage to a particular sort of instruction, still it will be found that some particular course is most productive of marks, and this will come into favour.

The few notices which we find of examinations in old times relate to tests of qualification for professions or crafts. We gather from notices of contests between the universities and the medical corporations in London that students had to pass an examination, after going through their apprenticeship, before being allowed to practise. But we never find that an examination was the sole test; it was always attached to a prescribed course of study and service. The foundation deeds of old endowed schools sometimes contain a provision for an examination; the object of this seems to have been rather to ascertain that the teaching was satisfactory than to classify the boys, though sometimes prizes and emoluments were awarded by the examiners.

University examinations are found to take their origin from the "disputations" which appear very early in the history of universities. Dialectical discussion had entered largely into the higher education in classical times, and when the university of Bologna was incorporated as a school of law by the emperor Frederick I. in 1158, disputations soon came into use as exercises for degrees. The university of Paris, which was founded soon after, and which was a school of theology and of arts, adopted the same course; and the forms of these exercises for degrees have survived to the present time in Germany, and did not disappear in England until 1860.

A student who aimed at a degree, which formerly only the more distinguished did, acted three times as opponent to other candidates, and was in time admitted to keep his "Act." This performance began by his reading a Latin thesis, in which he maintained some position in disputation against a doctor in the faculty, as well as the above-named opponents, and, in fact, against all comers. The debate was carried on in syllogistic form; the presiding doctor eventually summed up the controversy, and usually passed a compliment on the disputant, which was the earliest form of university honours.

Academical degrees, in their origin, implied a title to teach, as is seen in the names of Doctor and Master. The notion of a university degree as a criterion of general cultivation is comparatively recent: the B.A. or first degree, which is now so important, was not known in the earliest times, and is not even now granted in the German universities. The disputations took wonderful hold of the popular mind in the Middle Ages. It may be supposed that students looked more to points that gave an opening for attack, or that might be ingeniously defended, than to the truth of the matter; and as the question would

be settled by an appeal to the Bible or Aristotle, a habit of looking to authority was engendered. We may catch sight of analogous evils in the examination system; for under this the points that are most likely to yield questions are the most studied. The two plans are only different ways in which the student may make a display of the powers or the knowledge he has acquired We may observe that disputations bring out "powers," such as ease of expression in Latin, quickness in logical fence, and fertility of resource, more thoroughly than they do actual knowledge; they are better adapted for "Arts" than for sciences.

Each member of the "faculty" had a right of putting questions to the candidate for admission into it in addition to that of formally opposing him in his "Act," and this was freely exercised. This was the germ of the examination, which has since developed itself in England, and displaced the disputation. The transition from disputations to examinations took place in England during the 18th century, and it can be clearly traced at Cambridge, where the competitive system first attracted notice, from the *éclat* attaching to the "tripos list" and the senior wranglership. The name "tripos" has given rise to various strange guesses; the facts are as follows. For the appointment of some university officers, and for settling precedency, a list of those who took their B.A. degree was drawn out in order of priority of admission. This rule of priority was originally determined by favour; it was a piece of patronage belonging to the "moderators," who presided at the acts, and the proctors; afterwards it was settled according to the performances of the candidates at the acts, and eventually by the results of an examination in mathematics and natural philosophy. The day when these bachelors were inaugurated was called the "tripos" day, because on that occasion one of the old bachelors was appointed to take his place on a stool, and to dispute with the new bachelors. It was his business to make sport by a kind of mock disputation, and he was allowed much licence in his remarks. He was called "the bachelor of the stool" or "tripos," and the day was called "the tripos day." The list of names was called the tripos list, and it is probably owing to this need that there was for an order of seniority that the Cambridge tripos list came to be arranged in order of merit.

The subjects of discussion were originally taken chiefly from Aristotle; but soon after the publication of Newton's *Principia* it became usual to take one at least of the three questions which the candidate had to maintain from that work; a second was frequently taken from Newton's *Optics*, and a third from ethical philosophy. The authorities, we find, endeavoured in vain to prevent ethics from being thrust aside, and to maintain something like respectability in the Latin. Interest was concentrated on the mathematical subjects, three-fourths of them belonging to what we should call mathematical physics. These subjects could not be dealt with thoroughly in a disputation, and therefore the moderators adopted the plan of giving out questions which were answered in English. This eventually led to printed papers of questions being given, and in 1838 all vestige of the "Act" for the B.A. degree disappeared, although it was retained for a time in divinity, law, and medicine

The history of the tripos serves to bring into relief different views as to the end which an examination is meant to serve. Originally it was intended to guide men so that they might learn what was thought best for them, and in the best way; this was the educational view. But colleges had fellowships to dispose of, and the tripos list furnished a ready gauge of merit for the purpose. This made it incumbent on the moderators to exercise rigorous impartiality; and great pains were taken to secure fairness and to judge rightly. A list in order of merit would hardly have approved itself to public opinion in the way the tripos list did, but for the fact that the examination was almost entirely on one subject, and that a subject which admits of questions being set of every shade of difficulty, and for which there is a definite right and wrong. If several subjects had been combined, or if, as was the case at Oxford, the ethical element had been allowed to preponderate, the results could not have been so accurately weighed, there would have been room for difference of opinion, and the only safe course would have been to distribute the names alphabetically in several classes, or in a few classes containing wide brackets, which is nearly the same thing.

The most important change in an educational direction was effected by the influence of Dr Whewell in 1848. He introduced a compulsory examination of adequate length in the elementary subjects, especially elementary natural philosophy; this checked the practice of reading "scraps" of the higher subjects. The old educational party aimed at turning out men in the most effective condition for the ordinary struggles of life, while a later party sought to turn out mathematicians to supply the demands of the scientific world. In the old times the notion was that the senior wrangler would go to the bar, or stay at Cambridge and follow an academical career; now his destination is very commonly a professorship in Scotland or Ireland, or in the colonies. Hence the course at Cambridge has been made to include a technically scientific as well as an educational training; and it has been thereby so much extended that the amount to be carried into the tripos is excessive. As the whole cannot be read in the three years allotted, the tripos no longer affords a fair field for all those who collect together as freshmen, as it did forty years ago. A very high place can hardly be hoped for now unless much ground has been got over before admission to the university. This point has attracted notice, and changes are about to be made (1878).

Before considering other methods, it wiu oe well to take a general view of the action of examinations. First, it may be observed that the employment of examinations rapidly spreads. An examination at a school may at first be confined to a few subjects; it is then found that the rest are neglected, and however ill suited they are for examination, they must be brought in somehow. Again, if certain boys or classes are being prepared for an examination, the others think that they may take their ease, because they are not going to be examined, and the thoughts and interests of the teachers will commonly turn to those who have to prepare for this ordeal. Moreover, if some professions are guarded by an examination, those which are not so will become the resort of the dunces. Hence when examinations are once started they spread in all directions.

It is found that some branches of study are better suited for examination than others; and something more must be said as to the fitness of different classes of subjects for this purpose. Certain studies endow the pupil with the faculty of *doing* something he could not do before, such as that of translating foreign languages, or of solving mathematical problems; and there are others, like history, which though they may add greatly to the wealth of the man's mind, yield no such definite faculty or technical dexterity. We can test the possession of the first sort of acquirement directly, by calling on the student to put in practice the powers he is expected to have acquired. But with respect to the latter we can only ascertain that he recollects some portions of what he has prepared. By choosing these portions judiciously, we can tell whether the student has carefully studied the subject, and linked the various parts of it together, but we cannot make sure of the permanency of this knowledge. Young men used to examination will pick up

just the information suited for their examination in a very short time, from an analysis or tutor's note book, and forget much in a few days. This power of "getting up" and "carrying" is not without practical value. It is the power which enables a lawyer to master a mass of details, and we may allow credit for this, for it shows a good analytical memory; but it must be observed that what is thus rewarded is not so much a knowledge of the special branch of study as a power of acquiring, which very probably might be appliud to one subject as well as another.

It requires great experience and judgment in an examiner to deal with subjects like history and literature. He must have an eye for the cardinal points, and must know how a student ought to hold things together in his mind. If he yield to the temptation which seems to beset examiners of picking out "things not generally known," and minute details which a wise man is content to leave to be looked up when he wants them, then a kind of artificial knowledge, solely for use in examinations, will be engendered. In this class of subjects the profit obtained by the student is not proportionate to his recollection of what he has learned, and yet it is this recollection only which can be accurately measured. A student may have got good from his reading, and yet be able to do little even in a paper that is well set; because for an examination the subject must not only be read, it must be "got up."

The studies, on the other hand, which enable one to "do" something supply a power that is always at hand. A classical scholar can at any moment translate a passage. This difference is very important. "Information subjects" burden the memory and give rise to "cram" more than the others; besides, a faculty cannot be lost in a few months and information may. The more, therefore, that a competitive examination can be made to turn on "faculty subjects" the better. Information subjects can be dealt with more satisfactorily when competitions, which should be confined to an early age, are over, and the student is fitting himself for the work of life. He will read them most profitably when he feels that he wants the information, not for display, but for practical use.

Examinations, of course, tell us little directly about moral qualities; industry, indeed, they reward, but the work produced may have been done under the strong incentive of eagerness for success, or under compulsion, or in the absence of temptation, and under other circumstances the candidate's zeal may flag. Energy and tastes go far to make a man what he is, and of these examinations tell us nothing. A *course* of examinations tells something more as to steadiness of purpose and growth of mind than a single one, and a person who follows up an unusual kind of study—such as till lately natural science was—has probably a genuine taste for it.

It makes all the difference to the teacher whether the examination is subordinate to the teaching, or the teaching to the examination. In the first case he is really the educator—he lays down the course he thinks best. In the second he carries out a course which may leave him no option; and even if it embrace alternative subjects, these must often be chosen for the marks they will bring in the time allowed rather than for the good they will do the pupil On the other hand, if a teacher's work is not subject to some external test, he may get careless, and neglect to keep himself abreast of the progress of science and of the art of teaching. Of course no public advantages could be granted to a certificate given to candidates by their own teacher, when his interest lay in getting them through. If he were independent, like an authorized public teacher, he might be trusted, but he would then be a permanent examiner, and his style would soon be understood. There must, however, be some correspondence between the teaching and the examination, especially on subjects which can be treated in different ways. If a professor, for example, occupy himself with the textual criticism of a book, and the examiner ask no question on this, students will neglect the lecture. Hence, the public teacher should be in communication with the examiner, or form one of a body of examiners.

In Germany the difficulty is solved in this way. At the "abiturient" examination the teachers in a gymnasium propose two questions in each subject; of these the Government inspector chooses one, and this the candidates who are leaving for the university answer on paper. The errors in the answers are marked by the masters, and the papers so marked are considered by the inspector, who, along with the school authorities, and with some reference to the pupil's work in school, decides on his fitness for leaving the gymnasium.

The two functions of testing acquirements and of directing and stimulating instruction do not act always along the same lines, and the examiner and teacher may therefore pull different ways. If the examiner wants to pick out the sharpest lad in a school he will give great weight to anything that shows brilliancy. Excellence, too, in any one department is a far better sign of power than mediocrity in many. But the teacher does not want the clever boy to rely on his facility in Latin verses or to give himself up to his favourite study, and will make the examination turn on the general school work. He will set questions in the parts of the subjects which involve drudgery, in order to enforce attention to them. Propositions in Euclid and questions on elementary grammar may have no effect in discriminating between two clever boys; yet these questions must be set if Euclid and grammar are to be learnt.

Again, an examiner may only want to see that the candidate has a certain knowledge, namely, that which is required in the situation in prospect. He may want to see, for instance, that arithmetical questions can be worked correctly; if this can be done he may not care how the knowledge was got,—all he wants being the fact that it is there. But a boy may be taught to do sums by the old mechanical rules, and this kills the reason instead of developing it. The educator is teaching the boy by means of Euclid, arithmetic, and the rest, rather than teaching him Euclid and arithmetic for their value as possessions. He will therefore frame his paper so as to show that the boy has gone through the processes of study which he wants to encourage; his questions will involve principles. His paper may not gauge powers of computation so well as one containing a number of intricate sums to be done in a short time, but it shows whether the boy in learning arithmetic has used his brains.

Examinations are effective in three principal ways as regards education. First, they act as stimulants, partly by holding out the prospect of advantages of some sort, and partly by appealing to the combative spirit in human nature and the desire to excel. Stimulants are valuable in our pharmacopœia, though liable to be used too freely. Youths who might sink into inertness are often roused to vigour by seeing a definite object to work for, or by finding themselves engaged in a contest. On the other hand, if the idea of gain is presented to young people too early, it may over-ride all other motives, such as duty and regard for authority and desire to learn. To those who have been habituated to examinations, it seems useless to work for anything in which they are not going to be examined, and the examinations will not act as a stimulus unless something is to be got by them. Hence competitive examinations should not be often repeated; a single comprehensive one at the end of a long course may do good, but it must not be kept always immediately in view. The pupil