

THE SOUTHERN AUSTRALIAN REGISTER, THURSDAY, DECEMBER 17, 1885.

Umweitung of Busch  
See W. W. Hughes

# COMMEMORATION DAY AT ADELAIDE UNIVERSITY.

The annual Commemoration in connection with the Adelaide University was held in the Library of the University on Wednesday afternoon, December 16. There was a crowded attendance, and amongst those present, in addition to the members of the Council, the Senate, and the Professorial Board, were the Governor (Sir W. C. F. Robinson), the Attorney-General (Hon. J. W. Downer), Mr. J. H. Angas, and the Mayor of Adelaide (Mr. W. Bunday). The Chancellor (Mr. Chief Justice Way) presided.

## DEGREES—THE FIRST LADY GRADUATE.

The Dean of the Faculty of Law (Mr. J. W. Bakewell), the Dean of the Faculty of Medicine (Dr. Whittell), and the Dean of the Professorial Board (Professor Boulger) presented the candidates in their respective faculties to the Chancellor, who conferred degrees upon them as follows:—

LL.B. Degree.—George Henry Downer, Alfred Gill, William Alfred Edgcumbe Tucker.

B.Sc. Degree.—Edith Emily Dornwell.

B.A. Degree.—William Alfred Edgcumbe Tucker (South Australian Scholar and University Scholar), John William Walker (University Scholar).

The CHANCELLOR in conferring degree on Miss Dornwell asked to be allowed to say that they were all proud that she was the first Bachelor of Science, and the first woman graduate in the University. No graduate of that University had ever had a more distinguished career. He found on reference to the University records that she matriculated in the first class. In her first and second examinations she passed in the first class, and at the last examination, which had entitled her to that degree, she eclipsed her former efforts by passing in both subjects of the examination. (Applause.) In her distinguished undergraduate career, and in the manner in which she had taken that degree she had not merely done honour to the University, but she had vindicated the right of her sex to compete, and to compete on equal terms, with other undergraduates for the honours and distinctions of that University. In conferring on her that degree he trusted she would allow him the pleasure of handing to her a special prize from the Chancellor for the purpose of expressing in some feeble manner the admiration which he felt for her distinguished career. (Cheers.)

The following graduates from other Universities were admitted *ad eundem gradum*:—

Doctor of Laws.—Barlow, William, LL.D., University of Dublin.

Doctors of Medicine. — Symons, Mark Johnson, M.D. of the University of Edinburgh; Hamilton, Thomas Kinley, M.D. of the University of Dublin; Astles, Harvey Eustace, M.D. of the University of St. Andrews; Mitchell, James Thomas, M.D. of the University of Aberdeen; Watson, Archibald, M.D. of the University of Paris, *in absentia*.

Doctor of Science. — Rennie, Edward Henry, D.Sc. of the University of London.

Master of Arts.—Robin, Percy Ansell, M.A. of the University of London.

Bachelor of Music.—Ives, Joshua, Mus. Bac., University of Cambridge.

The CHANCELLOR, in admitting Dr. Barlow, expressed the satisfaction which he and he was sure every member of the University felt in finding that the learning of a fellow-worker with them from the commencement had been recognised by his *Alma Mater* in conferring upon him the well-deserved distinction of a Doctor of Laws during his visit to his native country. (Applause.)

The CHANCELLOR, referring to Dr. Watson, said that he was the Professor of Anatomy in the Medical School, which they owed to the bounty of Sir Thomas Elder. (Applause.) Dr. Watson was absent in Europe on a scientific mission, but it was felt that his distinction in the profession, and the enthusiasm which he had brought to the duties of his Chair warranted, and indeed required them to pay him the deserved compliment of admitting him as a graduate of the University. (Cheers.)

The CHANCELLOR, in admitting Dr. Rennie said he did so with pleasure, because Dr Rennie held the Chair of Chemistry, which they owed to the munificence of Mr. J. Howard Angas, whom they welcomed amongst them for the first time that day. (Cheers.)

The CHANCELLOR, in receiving Mr. P. M. Robin, M.A., said that he was the first of the South Australian scholars who had returned to South Australia. It was not a matter of surprise to them, who knew something of his undergraduate career in that University, that he had distinguished himself while at home, and that he came back to them with degrees from the venerable University of Cambridge and from the University of London. He was informed that in the examination of Classics in the University of London he was placed second to the gold-medallist for the year. (Cheers.)

The CHANCELLOR, in admitting Professor Ives, said that since his residence in the colony Professor Ives amply vindicated the choice of the distinguished members of his profession in England who selected him as the first occupant of the Chair of Music in that University. (Applause.)

#### THE SOUTH AUSTRALIAN SCHOLAR FOR 1885.

The Dean of the Professorial Board (Professor Boulger) then presented William Alfred Edgumbe Tucker as the South Australian Scholar for 1885.

The CHANCELLOR said he had had an opportunity of perusing the records of the University with respect to Mr. Tucker's career. He had no hesitation in saying that the South Australian Scholarship had never been more worthily won. (Applause.) At the Junior Examination Mr. Tucker passed second in the first class of the year 1880, and he matriculated in the same position in the following year. Each year during his undergraduate career Mr. Tucker had taken the first class in the curriculum for Arts; he had taken that degree in the first class, and he had achieved the unexampled distinction of passing through the curriculum of Bachelor of Laws and taking the degree of Bachelor of Laws at the same time as he took the degree of Bachelor of Arts. He had much pleasure in presenting Mr. Tucker to His Excellency the Governor as a graduate of the University of whom they had no cause to be ashamed. (Cheers.)

#### THE JOHN HOWARD CLARK SCHOLAR.

The Dean of the Professorial Board presented the John Howard Clark scholar, Cecil Silas Mead.

The Dean of the Faculty of Medicine presented the winners of these prizes:—Charles Henry Standish Hope (student of medicine), Anne Jacob, Jeannie Miller Campbell Walker (non-graduating students). The CHANCELLOR expressed the hope that the success of these students was only the prelude to further distinctions in the future. The certificates were then presented to the successful candidates in the first class of the matriculation and of the junior examination.

#### THE BUST OF SIR W. W. HUGHES.

The CHANCELLOR said he was sorry they had not on that occasion the pleasure of the company of Sir Thomas Elder as well as of Mr. J. H. Angas. He had received a letter from Sir Thomas in which he said that his absence was due to the heat of the weather, and that his interest in the success of the institution was unabated. (Applause.) His duty on that occasion was twofold. He had first to welcome His Excellency to the University. Her Majesty's representative would always receive a loyal reception within those walls. (Applause.) But they welcomed His Excellency in the capacity of a benefactor of the University, because it was to him that they owed the creation and existence of the Chair of Music, which had placed that University in the proud position of being, according to the distinguished authority of Sir George Macfarren, the only University out of Great Britain and Ireland, with the single exception of the great University of Harvard in America, which possessed a faculty of music. (Applause.) His second duty was to ask His Excellency to unveil the bust of Sir W. W. Hughes which had been placed upon the platform. In one respect no doubt that University and the two Chairs which bore his name would be Sir W. W. Hughes's best and most enduring monument. But, as was pointed out by the Bishop of Melbourne on a recent occasion, there was a danger that the very excellence of the work of institutions like that might have the effect of eclipsing the memory of their founders. Therefore, it had always appeared to him that it was desirable that something should be done to bring before their eyes constantly the lineaments of the men to whose munificence they owed the existence of that University. (Applause.) With regard to Sir W. W. Hughes, remembering that he was born when the century was only three years old, it did appear to many of them that if they were to do this thing in his lifetime it ought to be done at once. Some months ago he heard from his friend Mr. John Gordon, who was connected by marriage with Sir W. W. Hughes, that there was in existence a bust of Sir Walter executed by an eminent artist, and that therefore it would not be necessary to ask him to sit again for that purpose. He made bold to write to the Agent-General, who was always ready to do good service for the University, asking him to communicate to Sir W. W. Hughes the gratification it would occasion to every friend of the University and to the colony at large if that building were made the receptacle of a portrait bust of the munificent donor of the first endowment to which that University owed its existence. When Sir Arthur Blyth communicated their wishes Sir Walter was suffering from a severe illness and from the recent lamented loss of

Lady Hughes. Notwithstanding these circumstances of trouble, true to the ruling principles of generosity which had dominated his career, he at once readily complied with their request, and he presented them with the bust which was to be unveiled. The career of Sir W. W. Hughes, adventurous and varied as it was in its early chapters, as to its second half was part of the history of South Australia. For many years Sir Walter entertained the belief, shared by very few others, that in the open plains of Yorke's Peninsula there lay buried great mineral wealth. They knew that unencouraged by any successes in his search for years he pursued his quest, but when at last his perseverance was rewarded the discoveries which were made under his auspices brought what he wished could be brought to South Australia at the present moment, resuscitated property, and brought also to Sir Walter himself abundant wealth. (Applause.) Sir Walter was one of those men who was not spoilt by prosperity. He continued after this great accession of riches the same simple-minded man he was before, and he showed what was rarely manifested by men who acquired great wealth late in life, the most princely generosity. His munificence was not confined to his kinsfolk or to his friends; it flowed over into every channel of philanthropy, and it reached its culmination in the munificent gift of £20,000 to which the University owed the existence. (Applause.) For many years past Sir W. W. Hughes had not resided in the colony. Probably none of the students of the University had the honour of his personal acquaintance; but when the bust was unveiled he would no longer be to them a memory, an abstraction, a name. (Applause.) They would at once become acquainted with the strong and rugged lines of Sir Walter's countenance, and he thought they would recognise that his character was not unworthy of their imitation. Courage, enterprise, and self-reliance, strength of will, persistence in the pursuit of noble objects, princely generosity, patriotism, zeal for the advancement of learning, blameless living, fortitude in bodily suffering, had all been displayed in the incidents of Sir Walter's long and honourable life. Well would it be for this colony if the same manly virtues were illustrated by a long succession of students of that University. (Applause.)

The GOVERNOR, who was received with cheers, said the Chancellor's appropriate and eloquent remarks had left him nothing to say. It might appear to some people a very easy thing for a wealthy man to put his hand in his pocket and to contribute to objects such as those contributed to by Sir W. W. Hughes and others, but they had ample experience that this was not always the case, and when one who had made a large fortune in a new country like South Australia made up his mind to devote a large slice of that fortune to the founding—for practically Sir Walter was the founder of that University—of such an institution as that, then he said they did well in placing his bust in that building that his features might be always before them. There were two corners to that platform; one was now occupied by the bust of Sir W. W. Hughes; the other was for the present vacant, but if they placed upon it the bust of another gentleman, whose name he need not

mention, it would, he was sure, be received with great acclamation. (Applause.) He had pleasure in performing the duty entrusted to him.

His Excellency then, amidst applause, unveiled the bust of Sir W. W. Hughes.

PAPER BY THE GOVERNOR.

His EXCELLENCY then read the following paper upon "The Future of our Universities:"—"To offer for your consideration a subject so important and so extensive, more fit apparently for exposition by those who have devoted their lives to learning, and gained their knowledge from experience, than by one whose time has necessarily been engaged in the more active business of civil life, might seem a little ambitious. But as there are two sides to every question, and objects present varied features from different points of view, the general ideas suggested by history and by experience in public may not be unworthy of contemplation, even by those whose information is more exact and particular; and although the old proverb respecting 'lookers-on' is more than somewhat musty, it represents, as most proverbs do, one phase of truth, and this may excuse an attempt which otherwise would be one of some temerity. There seems to be a special reason for contemplating by anticipation the future of our Universities, because they are evidently in a transition state, as indeed society is, the wants of which they must supply, and the demands of which they must comply with. Less than a century ago our English Universities were in a state of crystallization, not indeed for the first time, as their histories teach us; and when it was proposed in our own days to subject the Oxford crystal to the process of cleavage, Dr. Pusey deprecated it on the plea that the system as it then existed was best fitted for the training of minds of the higher powers. Since then ideas on this subject have become more catholic, in the true sense of the word, and experience in other places, especially Scotland and Germany, has had more weight, if not altogether that which is its due, and a consequent enlargement of purpose and division of labour commenced. The necessity for the present being admitted, the question for the future appears to be how far such changes should proceed; or rather, perhaps, should any limit be put to progress by anticipation? and if not, then it behoves us to ascertain how that progress is to be provided for, directed, and fostered. And does not science proclaim that progression is the law of Nature, and that to stand still on the shore of the present is to be overwhelmed by the flood-tide of the future? When we reflect on the variety of subjects which occupy the thoughts and give occasion for the labours of men of science, and their probable increase and extension, if we may estimate them by the progress of science during the past century, their development must appear illimitable. The prospect fades away on a distant horizon, and we know nothing but that there is a vast domain beyond. It is true that there have been periods of extraordinary progress in knowledge before this; but there never was a time when the pursuit of knowledge was the single object of so many, and their labours so united and systematic. To attempt, then, to propose any limit outwardly would be not only vain, but a renewal of that process of crystallization which more than once in the

history of science has caused it to be 'cabined, cribbed, confined,' and rendered inapplicable to the demands which thereafter were to be made upon it. But in the extension of science, and its consequent necessary division, there are two dangers which threaten—on the one hand, from the concentration of mind on one subject, which tends inevitably to the formation of schools, and to dogmatism; and on the other, from the unlimited expansion of subjects, which, except in minds of the highest order, commonly ends in vague generalizations, indefinite conclusions, and, finally, exhaustion. To avoid these dangers, and attain to the result which should be desired, *the education of the people for the life of the community* (for even the pursuit of science for its own sake must have in the end that general application), one thing is of primary importance—mental discipline, which should precede the direction of the powers of the mind to special objects; and this, therefore, should indicate the lowest limit of the highest teaching, that of our Universities. For if, as has been suggested, there is no present possible anticipation of what the development of their teaching may be in the future it becomes essential to secure some fixed base or point of departure, such prior qualification as may ensure similarity of purpose, unity in action, and the maintenance of a due relation between the diverging paths of learning. Our Universities should be not merely schools for instruction in the sciences, but in science, for correlation implies unity, and possibly, therefore, in the not very distant future diversity may result in unity, as diverging bush roads often lead to the same point. But to traverse successfully not all, but any one path of science, the due cultivation of the judicial faculty, and power of logical induction, is essential. This at present is generally acquired during the progress of any special study, if it be acquired at all, but obviously with loss of time, and loss of time is, in this case, loss of knowledge. It results that University teaching, if it is to be fully efficient, requires due preparation for it. But here again we find ourselves among the rocks and shoals. Teachers in the higher schools, naturally ambitious, as all should be with discretion, have not unfrequently extended their teaching beyond its due limits, whether we consider them with reference to the time available for teaching or the age of those to be taught. It was the proud boast of a very eminent classical teacher, applauded by a large and distinguished audience, in presenting his pupils for prizes, that the examination-papers were similar to those for honours at Oxford. Yet those young men were destined to pass three years at one of our Universities. Either, then, his standard was too high or that of the Universities too low, and precious time and labour were consequently wasted. It is quite probable that the latter was the truth. It is of the nature of all corporate institutions to become crystalline and incapable of expansion. Universities have offered no exceptions. We might, in proof, go back to the schools of Magna Grecia, Athens, and Alexandria, or even of the East, but those of the Middle Ages, as they are termed, in Europe had their *trivium* and *quadrivium* as the limits of study, and when men like Scotus Erigena and Roger Bacon would go beyond they were either stopped by authority or their learning was



confined to themselves only. Indeed, all systematic teaching—we might say every system—implies finality, but in the pursuit of science we can never say 'Rest and be thankful.' At the period commonly termed the revival of letters, when, in the decadence of the Greek Empire, the learning of the Greeks became in its entirety the property of the South and West of Europe, the old routine of teaching was rudely interrupted; moreover, the paucity of books and teachers tended to confine the study of special subjects to the locality in which those who could teach them resided, and though the language common to all scholars, and the habit of passing from one University to another in search of knowledge, acting as a bond of union as well as means of communication, lessened the effect of this, yet different Universities came to be schools of special sciences, as those of Spain, Marseilles, Montpellier, and Padua for medicine; Bologna, Paris, and afterwards those of Holland and Germany for law; and ultimately our own Oxford and Cambridge severally for classics and mathematics. Further distinction and limitation resulted on the Reformation from the separation of States—at first States, and ultimately peoples, for the rule was *cujus regio ejus religio*, and government being despotic under every form, the people soon either submitted their faith to their rulers, migrated, or were destroyed, and as supply was limited, not to demand, but by command, the course of instruction was confined or extended accordingly. The gradual breaking up of the feudal system also was the cause of a change equally important, but having a similar tendency towards crystallization, and consequent dogmatic teaching, and indeed had a worse effect in making the higher teaching inaccessible to the poor, and thus by taking away all incentive to study to lower the standard of learning in the common schools. The sons of the gentry no longer finding their education in the houses of the nobility sought the Universities, which in consequence before long adapted themselves to the habits of the more wealthy, and the faculty of law, under the new conditions of society, affording an opening for those who preferred a civil to a military life, the requirements of the three learned professions prescribed the course and limit of University teaching. This tended also to a separation between the classes of the community, and it may be noted, by the way, that as, in consequence, the maintenance of private tutors in families became less frequent, women, shut out from the teaching of the Universities, had less opportunity for mental development. Of course the general diffusion of knowledge was checked, the number of the students at the Universities lessened. There was no need, as there had been once at Paris, to enlarge a city for the accommodation of students, nor to extend the subjects taught beyond the requirements of the few. They became not so much seats of learning as schools for teaching. But the progress of science could not be altogether thus prevented, however much the spirit of enquiry, confined to individuals, might be impeded. So progress, though slowly, continued, until, in the present era, the great development of natural science has demanded that expansion in our own country

of the system of teaching in our Universities which other nations had anticipated. Here let us pause. The present is within our own contemplation. So brief and perfunctory a treatment is indeed unworthy of such a subject even in the past, but as a sketch, however rough, may yet indicate the principal objects within view, and give landmarks to the traveller, this, however brief and imperfect, may be sufficient to direct us to the course we should pursue, and teach us providence for the future; and as an account of the effects of the teaching in Universities, its limitation or expansion, does not apparently exist in monograph, it may suggest indirectly the utility of their full development by some one of those who can devote their time and talents to the mental improvement of humanity. If now we proceed to the application of the experience of the past to the needs of the present time, we may come to some definite conclusions as to what should be the future of our Universities, so far as we can anticipate and provide for it. The laying a sound foundation, to be tested by the matriculation examination, which should be for the purpose of proving, not so much the amount of acquirement in particular studies as general mental discipline and training, and consequent fitness for application to any branch of science, appears to be the first essential. This, it will be observed, implies the working up to a fixed standard in the higher schools and colleges as preparatory to University teaching, so far at least as concerns those who propose to avail themselves of it. Similarly the lower schools would have the limit of their teaching fixed as preparatory to the higher, and so far a confined and systematized course of instruction appears desirable, and each division would supply the needs of one class of society generally, while offering no barrier to progress from one to the other, excepting in matters of time and cost. But if the ultimate object of the highest teaching is the *education of the people for the life of the community*, this must be provided for. No immediate and certain means are suggested for this in our present social condition, but subvention by the State, which indeed appears the most rational and just, for it is, in other words, the payment by the body of the people for its own education. The limits assigned to teaching point to the limits of this subvention. In the schools and colleges it should not be permitted beyond the recognised upper limit of their teaching. In Universities, where there should be no limit to expansion, there should be none to subvention; and as, in the one case, the estimate of the cost would be its proportion to the number of the population, so, in the latter, it would be by the amount of its intellectual development and the consequent demand for further progress. This demand has hitherto been ideal and arising from the abstract sense of its propriety in the few, not from the perception of its importance by the many, because the idea of the economic importance of science has hitherto been confined to the former; but, as times change, so men change with them, and many are beginning to perceive that the material life may be dependent on, and indeed the result of, the intellectual. Sir Lyon Playfair, in his address this year to the British Association for the Advancement of Science at Aberdeen, has given so pertinent an example of this that it may be well to quote it *in extenso*:—'After the German war

the Institute of France discussed the important question "Pourquoi la France n'a pas trouvé d'hommes supérieurs au moment du péril?" The answer (which we must remember the Press has made patent to the whole world) was because France had allowed University education to sink to a low ebb. Before the great revolution France had twenty-three autonomous Universities in the provinces. Napoleon desired to found a great University at Paris, and he crushed out the others with the hand of a despot and remodelled the last with the instinct of a drill sergeant. The Central University was so low in 1868 that only £8,000 was spent upon it for true academic purposes. Startled by the intellectual sterility shown in the war, France has made gigantic efforts to retrieve her position, and has rebuilt the provincial colleges at an expense of £3,280,000, while her annual Budget for their support now reaches half a million of pounds. In order to open the provincial colleges to the best talents of France, more than 500 scholarships have been provided at an annual cost of £30,000. France now recognises that it is not by the number of men under arms that she can compete with her great neighbour Germany, so she has determined to equal her in intellect.' The President might have noted in his address that in this France was returning to the ideas of her National Assembly at the first revolution. It appears, also, that Germany, fully assured as to the true cause of her superiority, and in order that her newly acquired territories should have the same advantages, has rebuilt the University and its library at Strasbourg, at the cost of £711,000, and gives it an annual income of £43,000, and, moreover, has provided it with eight laboratories, so as fully to equip it for the requirements of research as well as of teaching. France and Germany are therefore fully aware that science, in the true sense of the word, is the source of wealth and power, the spring of the life of humanity, and that the only way of increasing and extending its influence to this end is to enable and encourage Universities to make researches and spread existing knowledge throughout the communities. The means for this enabling and encouragement are those which have everywhere been suggested, and which France and Germany, not to say other nations, have adopted. The provision for professors, increasing in number with the increasing demands of science, and in such degree as will enable them to devote time to research as well as tuition, for the same rule will hold good for teachers as for Universities—there should be no upper limit to their teaching, therefore their individual science must be progressive; and further, in order that the unity of science and equal importance of its divisions should be declared and honoured, the degrees of our Universities of the future should be extended equally to all the sciences. The higher degrees in law, physic, and divinity were sufficient when the teaching of the Universities was confined to those subjects. We have, indeed, that of Doctor in Philosophy in the German Universities, but that is obviously too general, and may mean anything. At Oxford and Cambridge class honours are given in some sciences, and music has always held her own, but these are only small beginnings; a general extension must follow—may it be soon. And as, on consideration,

we come to perceive that no branch of natural science can be taught or its limit extended in the lecture-room and by books merely, the necessity for well-appointed observatories and laboratories, extensive libraries and museums, and even workshops becomes apparent. In these the mother country is still far behind others, held back in this by tyrant custom, as in some other matters also; but we, who are emancipated from it, should take full advantage of our liberty. Although the success of the Universities of Scotland, and may we not say of the Scotch people in consequence, has been mainly attributed to the accessibility and goodness of the common schools, while that of the German has been to the extension of the number of subjects taught, much may, with reason, be attributed to their number in proportion to population. By the increase, the want of expansion, isolation, and consequent antagonism which characterized the Universities of the past would be avoided, and certainly nothing tends more to the general advancement of science than the regular and systematic application of many minds to each of its particular divisions, and it behoves us to bear this in mind, for already we have evidence that the new worlds have become, if it may be said without disrespect, teachers of the old. What Canada and the United States have done is well known, and we at least are not ignorant that Australia has asserted her position in this to the present. What she may do in future time will depend on what she does for and by her Universities. We have seen the necessity that University teaching should be brought within the means of all who are fit to profit by it. It is now more necessary than ever, because the mass of the people are advancing rapidly in power, and because all class teaching leads to limitation and dogma. A present remedy is to be found, as by the French, in the establishment of scholarships from the higher schools and colleges, and by similar stimulants to talents and industry in the Universities themselves, and possibly the same advantage might be given to those in the lower schools also. With respect to provision by endowments, it may be observed that experience shows them to be favourable to healthy action when carefully watched and supervised in their application by authorities from without. Mere domestic visitation has been in them, as elsewhere, commonly ineffective, and certainly, if knowledge is the life of the community, it should be the first duty of the State in its government to take cognizance of all seats of learning and secure their efficiency and progress. Whatever the cost may be, or however provided, it must prove productive in investment or expenditure. Until of late years, and, indeed, among some even yet, the intervention of the State in education has been looked on with jealousy; but this must pass with the necessities of the times, as in no country has any sufficient progress been made without its intervention. Universities are places for mental, not physical development. They desiderate mental athletes; the *mens sana*, though most desirable to be found *in corpore sano*, yet takes no cognizance necessarily of athletics. They are of much consideration at present, but may be well left to take care of

themselves for the future. In the contest between light and darkness, spirit and matter, it is to be feared that the majority are always but too ready to side with the latter. There are still two aspects of our subject which should not remain unnoticed—the civil and religious. In some countries students in the Universities have rights and privileges which should seem incompatible with the status of a pupil. Whether professors should have *ex officio* other privileges than such as are sufficient to secure their leisure for teaching and study need not be in question. Whether Universities should elect their own representatives to the Legislature is a matter that affects their efficiency and progress but little; their best influence and security will be found in the results of their work. With respect to religion, as science deals with facts, not opinions, the knowledge of dogmata is not true science; but, as mental science has never been, and we may assume can never be, separated from divinity, under whatever aspect it is presented, without which indeed the science of history would present but a barren and unintelligible accumulation of events without causes; and as, moreover, religion in its moral application must take its place in social science and ethics, if treated scientifically, there is no fear that it will be neglected; and we may note that the preparation for any course or courses of instruction in the University might be made in denominational schools, as they are termed, by those who so desired. In one point the Universities of the future must differ essentially from those of the past. The advantage which the latter had in the common language of the schools has been lost in the community of nations; the loss of the one can only be compensated by the knowledge of many. Those with which men have intimate relations are, of course, the most important to them. For ourselves, though our present relations are rather with Europe than Asia, it is to the latter we must look for them in the future, and this should suggest to us the necessity for provision for the study of the languages of that continent; and it should be remembered that, from their literature and philosophy, much may yet be learnt to our advantage. There seems, indeed, no limit to the extension of the subjects to be taught in any University but the means and the men, neither of which we may be sure will be wanting in the Australia of the future; but if there be no limit to the extension of University teaching there must be to its present consideration. Let us then, in conclusion, illustrate the ideas which have been suggested by a similitude. Schools and colleges may be likened to trees, which, when well rooted and nurtured, put forth, each one independently of the other, from the parent stem goodly branches, with brilliant and odoriferous flowers, and rich and nourishing fruits, and in them Hesperian fables may indeed prove true. A University may well be typified by the gigantic banyan-tree, which, equally also nourished from the soil by the original root as well as through its leaves by the aerial currents and moisture, not only like other trees fructifies, but from its branches throws down shoots to form future stems, where extension has made support necessary. These, new rooted in the ground, afford fresh nutriment to, and, like pillars, bear up the vast expansion of the verdant roof. Both alike receive future nutriment from the leaves and fruits which they have brought to perfection; and as the growth of a tree

depends on the goodness of the soil in which it has been planted, the moisture and air which it imbibes, and the warmth of the solar rays which vivify it, so our Universities of the future, not wanting the means of light and life, will extend their growth, and find fresh support and renewed life, till, like the banyan, they count their pillars by the hundreds, and their period by that of the human race."

ADDRESS BY PROFESSOR KELLY.

Professor KELLY, M.A., then delivered the annual oration. He said:—I am glad to have this opportunity for addressing so many who are interested in the mental welfare of our rising generation, and if I shall appear to some of you to speak at times warmly it will be because I feel strongly on the subject I deal with, and because in a country and an age so eminently practical as this I stand forward as the advocate of a cause which is the cause of a minority. Until comparatively lately the opinion of what should be the basis of education for those whose duties in life demand the active brain rather than the skilled hand has been virtually undisputed. Critical and close study of those languages which have for many and good reasons been selected as the best for the purpose, supplemented by the methodical development of the intuitions of space and time (I mean geometry and its cognate subjects), have been proved the most solid of foundations on which to erect the superstructure of learning. To support this statement by enumerating the more obvious advantages derived from such studies by particular classes of the community would be to stake my success on the weakest part of my evidence. A sorry return, indeed, it might be called for so many years' painful labour if the sole benefits resulting were that our clergy should be able to read the Scriptures in the original, our lawyers have nearer access to the Roman code, our physicians be qualified to translate their own prescriptions, or our speech-makers gain a facility in quoting tags of the classics without offending by false quantities. On the other hand, to show a direct connection between Latin and Greek inflections or Euclid's problems and the results which we believe them to produce is a difficult task. The area of their influence is unlimited, and by its very comprehensiveness eludes particular observation. The secret cord of communication is not tangible, but every hour that the student spends in puzzling his brain over some difficult construction, every time he has peered in thought into the depths of words and phrases, during all those years which misguided utilitarians believe with pitying contempt are being wasted, he is putting a keen edge on the tools wherewith he is to carve out his future career—he is, as he will be in future life perpetually weighing in his balance contending probabilities, continually practising the discovery of truth. The discipline is unquestionably severe, and in its beginnings at least monotonous and uninteresting. So too is the humiliating goosetep, the first lesson in the drill which produces the manly bearing and attitude of the soldier. And the very self-denial and submission thus inculcated in the days of youth are the germs out of which spring manly perseverance and modesty, virtues so lovable in later years. But that we pay too high a price for even

such advantages as these is an objection urged by many. There are more ways than one, they say, and pleasanter ways by which youth may travel, and yet reach its destination quicker than by the path so long and successfully followed. I will admit that the routine of classical and mathematical study might often be made more interesting than it is, but it must be allowed that anything hitherto proposed as a substitute seems to fill but a small corner of the vacancy. More than one of our educational reformers have suggested that our native tongue deserves at least as much of our time as languages that are dead, and maintain that it may be made an equally valuable training, with the additional advantage of being more practically useful. French, German, Italian, and other modern languages are recommended on the same principle. But the gymnasium of the classics is fitted up with ingenious appliances that bring mental muscles into play, which would never be discovered or developed by any other exercise. The man of most universal sympathies is he who has studied the feelings and tastes of men furthest socially removed from himself, and similarly he will be found to possess the greatest breadth of intellect and power of expression who has familiarized himself with the tone of thought and the idioms of a people who in these respects offer strongest contrast to his own. Such contrast opens up to the student new vistas of ideas, spreads before him fresh woods in which his imagination may disport itself, makes him more a thorough master of the true analysis of English sentences than all the distressing jargon of unnecessary terminology found in some modern English grammars. The studies of classics and English need not, must not, be divorced from one another. Proper instruction in the classical languages can be made to do all that is required for a sound scientific knowledge of English, if only care be taken to prevent boys from writing down the plainest nonsense under the mistaken idea that it is a literal translation of the original; if it be impressed on them that to translate the same Latin word always by the same word in English is not always to be literal and seldom fails to be ridiculous; if the teacher makes a point of as frequently as possible investigating the radical force of words and showing the original meaning from which the various developments and departures of its other significations radiate; if, I say, these precautions be taken, and no mistake in spelling, violation of good English usage, or misuse of words be allowed to pass unnoticed, then boys are in the fair way to reach that point in the cultivation of English beyond which their own taste and judgment must be their tutors. Surely this would be a sounder training than to put into their hands such manuals as are now being poured in quantities into the book market—books whose only aim seems to be to relieve the young student of all the trouble of thinking for himself, to thrust down his throat cut-and-dry opinions which may be reproduced as his own afterwards, undigested and unassimilated. Bookmindedness, as Wordsworth terms it, is a virtue that is easily carried to excess. Mathematics, too, though a necessary supplement to the classics in the youthful training, fall, if taken alone, far short of its requirements. Reasoning as

they do from necessary premises to certain conclusions, they are an excellent guide to the cultivation of close continuous thought, but they leave untilled the whole estate of contingency, comprising by far the largest acreage in man's mental inheritance, leaving it at the mercy of the weeds of superstition or disbelief. *Urenda felix, neglectis nascitur arvis.* A celebrated mathematician in the unclassical days of the University of Cambridge declared that Milton was not worth reading, because nothing was proved by "Paradise Lost." So the mere mathematician is prone either to refuse assent entirely to all conclusions which cannot be deduced according to the stern rules of his own science, or credulously to accept them without due investigation. Touching the proposal to substitute for classics one or more of the physical sciences I scarcely think it worth our serious consideration. Not but that plausible arguments well suited *ad captandum vulgus* are more ready to hand in support of this than of any other scheme. But mere accumulations of statistics, however carefully classified and docketed in the mind, cannot educate—that is, they cannot elicit or bring to light any potential talent Nature has hidden within us. If the intellect while immature be crammed with a mass of facts they only serve to hamper mental energy and clog every effort of original thought. If the mind's apprenticeship be occupied solely in amassing materials that mind will have but poorly learnt its trade. Do not understand me to mean that these sciences are unworthy of a place in our system. My contention is that they should wait till a more generous course of study has ripened the brain. Nor will there have been any loss of time on this account. They will flourish more vigorously if the bud be grafted on a well-matured and healthy tree than if puny roots had been planted earlier in the ground. Now, classical education, to quote the sentiment of Döderlein, while presuming that all its pupils are designed for some intellectual employment, does not trouble itself to enquire what particular sort of employment that is to be, keeping only in view the fact that such ulterior occupation will demand the most practised exercise of the faculties, while the encouragement in schools of such exercises as will be most subservient to the business of life (a plan the infallibility of which has always found quickest acceptance with the most narrow-minded) is calculated only to debase every one of the more intellectual occupations to the rank of a better sort of trade. The mere scientist then may be a most useful labourer in his own particular groove, as one of the intellectual machines among which labour is now subdivided, but he will be, as it were, looking through a key-hole at the world and believing it must be bounded by the same limits as confine his own vision. The curriculum of the Adelaide University takes for granted that the preliminary education of candidates for degrees and honours has been conducted on the principles I now advocate, since it requires that each shall have read a portion of some Latin author, with due regard to grammar, syntax, &c., and expects, though it does not insist upon, a similar training in Greek. For the first year after their entrance as undergraduates a like routine is prescribed, and it is not until the second year of their course that the students are held sufficiently matured to be allowed to specialize. Then, leaving the vestibule of education, they may



enter the halls of learning and diverge in their studies according to their several tastes and aptitudes. Some devote themselves to the sciences, others ascend to the nobler realms of higher mathematics, while a happier few will prefer to advance their scholarship to learning, to lounge in the bowers of the Muses, to enjoy therein the pleasure which only the initiated can appreciate, and take a place among the *καλοὶ καὶ ἀγαθοί* of their generation. But unhappily our well-meant scheme has been crippled in its infancy. The examination by which we proposed to test the fitness of candidates for entering on our course has been turned to baser uses. By what I cannot but think a most injudicious concession to popular opinion, we have allowed those who come to be examined the option of neglecting some of the subjects which we insist upon, and rightly, too, as necessary for the undergraduate course; while we honour with certificates some who have reversed the time-honoured maxim "*non multa sed multum*," and whose smattering of miscellaneous information can scarcely fail to endow them with a most unwarranted and premature appreciation of themselves. It is just questionable whether the University should continue an examination merely as a final test for boys leaving school. It is unquestionable that it is unsuited as an entrance to our course, as it does not guarantee that those who pass are competent to take advantage of all the lectures, while it excludes some who are. I allude to the regulation which leaves Greek optional with the matriculation candidate. Why it has been so thrown into the shade by its sister language has always puzzled me. Latin is no longer the common tongue of the diplomatic and ecclesiastical world, and if judged on their intrinsic merits Greek bears away the palm without a fall. Anyhow it is required as well as Latin for the first year of our B.A. course, and ought by all laws of common sense to be required of all those who propose to enter on that course. But most of our candidates have learned to regard our matriculation examination as the completion of their education and not in its true light as only the introduction to their real studies. This is the source whence springs the discontent that periodically follows the publication of our class-lists. All the candidates naturally do not rise to the standard required. Some disappointed ones, confident that their failure cannot have been their own fault, attribute it to the folly or malice of their examiners, and sometimes tell the public so. To acquire a true sense of our own ignorance is, according to Socrates, the first step to knowledge; but this is an unpalatable lesson, and often can be taught only by vexatious failure and bitter disappointment. Besides the wide range of subjects in which the student is allowed an option, there are some more elementary which are imposed as indispensable. Now it often happens that all the time and energy of the student has been devoted to the more advanced department, to the detriment of the more than equally important rudiments. And it is an established principle among the examiners that no one who has displayed a weakness in what all boys should have learnt before their fourteenth year shall be admitted to any place of distinction in the lists, how-

ever well he may have otherwise acquitted himself. The comparative table of the marks allotted to each subject, drawn up after much deliberation, has an eye, firstly, to their relative worth as educational elements; secondly, to the time necessary for their study. This system cannot in the nature of things be absolutely infallible, and a difference of two or three places is not to be relied upon as indicating any definite superiority, though we always try to leave an appreciable gulf between the classes. But examinations are useful for more purposes than the mere classification of candidates. It is by no means the least of the recommendations of these ordeals that they apply the touchstone to that vague illusory semblance of knowledge so often mistaken by its possessor for the real substance; they compel definite and concise ideas; they perform the part of Socrates, in the *Theætetus*, when he tests the offspring of his young friend's soul to see whether it be *ἀνεμιαῖον* or *γονιμὸν*. And to conclude with the words of Mr. Gladstone, spoken twenty-three years ago—"I do not deny that a certain trick or craft may be practised in them, that some may think more of the manner of displaying their knowledge to a momentary advantage like goods in a shop window than of laying hold upon the substance. But I say that these abusive cases will be the exceptions, not the rule. I say that those who so unjustly plead them against the system forget that this very faculty of the ready command and easy use of our knowledge is in itself of immense value. It means clear perception, it means orderly arrangement. And, above all, they forget what I take to be the specific and peculiar virtue of the system of examinations, namely, this: that they require us to concentrate all the faculties of the mind with all their strength upon a point. In and by the efforts necessary for that concentration the mind itself, obtaining at once breadth of grasp and increased pliability and force, becomes more able to grapple with great occasions in the subsequent experience of life." (Cheers).

The CHANCELLOR expressed his thanks to the Governor, to Professor Kelly, and to the many friends of Sir W. W. Hughes who had attended. The proceedings then closed.

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