the study of the thermal diffusivity of massive rocks. Mr. Barus's investigation of diabase was most fruitful pioneer work and afforded the starting point for improvements which ought now to be applied to a revision of his results.

Notwithstanding the inadequacy of the data, I can not but believe that the 60-million-year earth here discussed is a fair approximation to the truth and that with better data this age will not be changed by more than perhaps 5 million years. It is in good accord with geological estimates from denudation and sedimentation, with the age of the ocean as inferred from the sodium content and with the age of the moon as computed by Sir Geo. Darwin. Finally, as I shall show elsewhere, it indicates that the part played by radioactivity in the heating of the earth is a subordinate one.

George F. Becker

U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C., January, 1908

QUOTATIONS

THE GREAT BEQUEST TO TRINITY COLLEGE

By the death without issue of Lady Pearce, who survived her husband, the late Sir William George Pearce, by less than two months, Trinity College, Cambridge, becomes immediately entitled, as we have recently recorded, to the large property in which she had a life interest. It does not often happen that the way is cleared for the owner of the remainder interest with such dramatic rapidity as in this instance. Nor does it often happen that so substantial a sum comes into the hands of any college or educational institution in this country. The total value of this bequest to Trinity College is probably considerably more than £400,000, but taken only at that figure the benefaction is an extremely handsome one. Trinity, as the most distinguished college in the two universities, is in every way worthy of this piece of good fortune, though there are doubtless many less prosperous colleges that may be pardoned for regarding it with somewhat envious eyes, and for quoting the hard saying, "to him that hath shall be given." Trinity will undoubtedly know how to make good use of the money for educational purposes; still, it may be regretted that, in view of the poverty of the university as distinguished from the colleges, some part at least of this large sum was not placed at its disposal. There are statutory provisions in force. both at Oxford and at Cambridge, whereby each college contributes a certain portion of its revenues either to some specific purpose, such as the payment of a professor's stipend. or to a common university fund to be applied to university purposes in general. Under these provisions, the university will, we presume, take its appointed toll of the Pearce benefaction to Trinity. But it is not otherwise a beneficiary. Yet in 1896 the total revenue of the university amounted to only £62,000 odd—only £844 of which was not specially appropriated—whereas in 1907 the gross annual revenue of Trinity was over £76,000.

A few comparative figures will serve to emphasize this contrast. Trinity already possesses the largest revenues of any college in the university, its gross income amounting, as stated above, to over £76,000 out of an aggregate total of £316,000 odd enjoyed by all the colleges. No doubt its outgoings and responsibilities are proportionate to this large income; but the new benefaction, probably amounting, as we have said, to considerably more than £400,000, may perhaps be taken as equivalent to an additional net income of £15,000 annually. There are no fewer than eleven out of the seventeen colleges at Cambridge of which the respective gross annual incomes amount to less than this, ranging from Magdalene with only £4,782 a year to Christ's with £14,371 a year; while a twelfth, Clare, only just exceeds it, having a gross annual income of £15,104. These figures are not cited invidiously. Their sole purpose is to show that Trinity is now about to enjoy an additional income, free of all charges, which is more than equivalent to the gross annual incomes respectively enjoyed by more than two thirds of the colleges at Cambridge. On the other hand, it is certain that at this juncture the needs and deserts of the university as

such are far greater than those of any college. For more than ten years past the Cambridge University Association has been laboriously collecting funds for the reendowment of the university and its adequate equipment to meet the educational and academic needs of the modern time. Some four years ago, on the occasion of the opening by his majesty the king of four new university buildings, the erection of which was largely promoted by this association, we published three articles by a special correspondent in which it was shown that the needs of the university, all more or less urgent and yet evaluated at a strictly moderate estimate, could not be satisfied by anything much less than a capital sum of a million and a half. It was also pointed out that the buildings of the University of Strassburg had cost nearly a million; that the state endowment of the University of Berlin was nearly £170,000 a year; that private effort had endowed the universities and colleges of the United States with more than £40,000,000 in a few years; and that in two years alone the funds obtained from this source had amounted to nearly £7,000,000. Yet at that time the Cambridge University Association had only succeeded in collecting some £71,000 in the course of seven years, a sum less than the gross annual income of Trinity by more than the gross annual income of Magdalene, and only about a sixth of the stupendous windfall which has now fallen, unsolicited and unexpected—though we are far from saying undeservedly-into the lap of Trinity.-The London Times.

THE GEORGE WASHINGTON UNIVERSITY

At the meeting of the Board of Trustees, held on January 8, 1908, certain recommendations of President Needham, affecting the educational work of the university, were adopted.

1. The courses of instruction in the Department of Arts and Sciences were put in charge of two general faculties; namely, the Faculty of Graduate Studies and the Faculty of Undergraduate Studies. The latter faculty is composed of all professors, assistant-pro-

fessors and instructors who carry on instruction in the several undergraduate colleges and divisions.

- 2. In Columbian College, the B.S. degree was discontinued, and the requirements for the B.A. degree were changed so that it might cover the courses formerly embraced by both B.S. and B.A. English, mathematics and a foreign language (Latin, French or German) are specified as the required studies, constituting 9 out of 15 points for entrance, and 9 out of 60 points for the attainment of the B.A. degree.
- 3. In the Law Department beginning with the next academic year the requirements for the LL.B. degree are increased to fourteen hours per week, the full day work beginning at 9 o'clock in the morning. Beginning with the academic year 1909-1910, the requirements for admission to this course are two years of college work or its equivalent, with the provision that students who have not the required college work may be admitted as special students and if they obtain a record of B or better, they may be recommended for the degree. There has been established in this department for half-day students, a course of ten hours per week, covering three years, to be given between the hours of 4:30 and 6:30, and for the full course of thirty hours the degree of B.L. will be given. A four-year course of twelve hours a week will be open to students who received the B.L. degree and such students as complete the fourth year course and meet the requirements for admission and graduation will be entitled to the degree of LL.B.
- 4. In the Department of Medicine, beginning with the session of 1909-10, the requirements for admission will be two years of college work or its equivalent.

WILLIAM STRATFORD

Professor William Stratford, for fortyone years a member of the teaching staff of the New York City College, died on January 24. He was born at Newtown, L. I., in 1844, graduated at the City College in 1865, and took the degrees of M.D. and Ph.D. at New-