along the line which the authorities of Harvard have marked out for themselves. Appreciative reference is made to the work of Professors Asa Gray and Ernest Young, who died during the year, and also to Robert D. Smith and James Freeman Clarke, whom death removed from the board of overseers. Mr. Eliot notes the fact that in 1888 the examinations for admission to the college were for the first time conducted exclusively on the new plan announced in 1886. It seems that the secondary schools and the private tutors have already responded in considerable measure to the new suggestions and requirements of the faculty. Of the 315 candidates who completed their entrance examination in 1888, 31 presented the history of the United States and of England instead of the history of Greece and Rome; and 93 presented elementary experimental physics, as recommended by the faculty, instead of descriptive physics and astronomy. Both French and German were presented by 110 candidates. The figures prove that the new requirements have already stimulated the teaching of modern languages in secondary schools, and have promoted the introduction of laboratory methods of studying physics and chemistry. It is pointed out that in the progress of converting Harvard College into a university of liberal arts and sciences, about the same gain was made in 1887–88 as in each of the years immediately preceding. "Progress," says President Eliot, "may be made in one or more of four principal directions: (1) in amplitude of instruction; (2) in freedom in choice of studies; (3) in better arrangement and co-ordination of studies within single departments; and (4) in *morale*." The gain in the volume of instruction during the year 1887–88 was about five per cent; that is, from 485 hours a week to 510 hours. In respect to freedom in choice of studies, the freshmen gained access to several departments from which they had previously been excluded; namely, Spanish, Italian, and music. President Eliot holds that it is to the advantage of every department that its elementary studies be open to freshmen, because otherwise the advanced courses of the department might not be reached in due season. In respect to co-ordination of courses, there was an entire recasting of the whole set of courses in physics, with the result of securing a better sequence of subjects and a more complete covering of the ground. Additional facilities were afforded for taking up advanced study and research in German and in Romance philology.

The *morale* of the college has been favorably affected by several causes. The voluntary method in the religious services gives satisfaction to teachers and students. "It meant the permanent removal of the question of conscience, and the drying-up of a constant source of irritation and ill feeling, and the reparation of what many believed to be a grave injury to religion, and the establishment at the heart of the university of a fresh, strong influence for good." Under a new regulation, also, the instructors have the power to exclude from their courses any students who neglect the work required of them. This power has been extensively used, and as a result the discipline and the progress of the students have improved. The question of athletics has been settled to the satisfaction of every member of the university, and Mr. Eliot adds of the faculty, "that they hold that dyspepsia is less tolerable than a stiffened knee or thumb, and that effeminacy and luxury are even worse evils than brutality." We notice, also, an interesting remark in this report regarding the physical condition of students holding scholarships. It seems that the college is now paying out more than fifty thousand dollars a year to students who need aid to complete their education. Heretofore it has been usual to pay no attention to the bodily condition of the recipients of this beneficiary aid, and it is believed that these recipients fall below the average of the whole body of students in health and vitality. It is now provided that holders of scholarships shall present themselves twice in the year to the director of the gymnasium to be examined as to their physical condition, and to receive suggestions as to the care of their health. The summer courses, the library, and the professional schools are all touched upon, and valuable information is contained in the appendices.

SCIENCE AND THE DICTIONARY.

ONE of the most important accompaniments of the progress of science, indeed an essential factor in it, is the increase of its vocabulary. Every advance in accurate observation, discovery, analysis, or constructive theory, brings with it a new term, or, more often, a group of terms. This multiplication of words is largely inevitable. The new things must, of course, generally receive new names, and the new ideas will not always fit into the frames of association in which the old words are set. The scientific demand for precision and brevity must be satisfied even if linguistic purity suffers. It thus happens that every year the language of science receives a large addition which students of science must understand and use. How very large this increment is, it is difficult, even for those who are familiar with several departments of science, to appreciate. Moreover, the process of growth does not stop with what is necessary. Unfortunately, the liberty which in many cases must be taken with the language has led many reputable scientific men to feel that they are free to do what they please with it, in any case. The result is a vast number of coinages which might have been dispensed with, but which must be learned and remembered, since they often become current through the reputation of their inventors. The number of such words increases at the rate of probably several thousand a year.

To this increment through direct coinage must also be added the numerous, and not less significant, specializations and enlargements of the meaning of established and even common words, such as "energy" and "potential." Every movement in science unsettles much that has been done before, and of this continuous re-adjustment its language is a true reflection.

It is obvious that at this point science can receive a great deal of help from competent lexicographic aid. While the dictionary is not, in many respects, an adequate exponent of scientific knowledge, it may be an invaluable record of the greater number of the elements or details of that knowledge. Its aim is, of course, necessarily to state merely what is or has been in the language it describes, not what scientifically ought to have been; but, if it is accurately and intelligently performed, this historical labor approaches in its value to science very near to original work. It is true, also, that the utility of the ordinary dictionary is limited by the narrowness of its definitions and the formalism which marks its treatment of its material; but these defects are largely conventional, and it is quite possible for an editor who understands the wants to be met, and who has the necessary disregard of traditions, to model a dictionary which will satisfy every reasonable scientific demand. In a word, the impossibility now felt of keeping track of the linguistic development not only of science as a whole, but even of one specialty, and the difficulty of guarding even established words from misuse or abuse, make the construction of a dictionary which will not only record the entire vocabulary of the sciences, but will record it and define it so fully and accurately as to conform to the needs of scientific men, one of the most urgent requirements of the time. It is therefore worthy of note that the attempt has been made in this country, and by American scientists, to produce a book of this kind. It is announced that the "Century Dictionary," which has been for some years preparing, under the editorship of Professor W. D. Whitney, is to be not merely a complete general and historical dictionary of common English, but also an equally complete dictionary of technical terms; and that this technical material, which has been obtained by searching all branches of scientific literature, has been put into shape by competent specialists, who have had in mind the necessities of their fellow-craftsmen, as well as the wants of laymen. It appears, thus, that an effort is seriously making to embody for the first time comprehensively, in lexicographic form, the scientific spirit and work of the nineteenth century; and while it is to be expected that the most direct result of the attempt will be the promoting of popular intelligence, it is also to be expected — from the reputation of the distinguished editor-in-chief and of his co-laborers, among whom are Professor J. D. Whitney, Professor E. S. Dana, Dr. Sereno Watson, Dr. Lester F. Ward, Professor C. S. Peirce, Professor T. C. Mendenhall, Professor R. H. Thurston, Dr. Elliott Coues, Professor Theodore Gill, and many others — that the interests of pure science will not be neglected.