

find here a number of other words suggested by him—'cosmopathic,' 'hyperpromethia,' 'methectic,' 'telergy,' etc., which we may not only soon find in the Century Dictionary, but may also hear on the street corners some day.

DR. LÉON BERTRAND, of Antwerp, describes in the *Medical Record* a fluoroscope in which double fluoride of uranyl and ammonium was used as the fluorescent substance. This is said to be fully as good as other substances, such as tungstate of calcium and to be much cheaper.

ON July 4th the Royal Societies' Club gave a complimentary dinner and reception to the newly elected Fellows of the Royal Society and the newly elected Royal Academicians and Academicians-elect. Speeches were made by Sir Clements Markham, Sir Robert Ball, Prof. Ray Lankester and others.

The Railway Review describes a foul-air indicator exhibited at the Industrial Exposition at Zurich, Switzerland, which is designed to show whether and in what degree the air in a workshop or other inhabited room is contaminated. The apparatus is described as consisting of an air-tight closed glass vessel filled with a red fluid. Through a glass tube that dips into the liquid and is bent at the top a drop falls every 100 seconds on a cord that hangs beneath and that is somewhat stretched by a weight. The fluid from which the drop comes has the property of changing its color by the action of carbonic acid. The more carbonic acid there is in the air the quicker this change in color takes place. If the air is very foul the drop becomes white at the upper end of the cord, while the change of color corresponding to a slight proportion of carbonic acid does not take place till the drop has run further along the cord. The exact condition of the air can be ascertained by observing a scale that is placed alongside the cord and divided into convenient parts, bearing the designations, 'extremely bad,' 'very bad,' 'passable,' 'pure.'

MM. BEAUREGARD and Dupuy have reported to the Paris Academy, experiments on electrical variation in the acoustic nerve when excited by a sound with one electrode placed on the tympanum and one on the nerve it was

possible to note the variation of the current with the pitch of the sound which gives a method for determining the range of audibility for pitch in the lower animals.

UNIVERSITY AND EDUCATIONAL NEWS.

THE FUTURE OF AMERICAN COLLEGES AND UNIVERSITIES.

IN the *Atlantic Monthly* for August President Gilman takes the appearance of the memoirs of Barnard and McCosh as an occasion to review the progress and outlook of universities in America. President Gilman's article is of special interest, as he not only writes from wide knowledge, but also with the power to carry into effect the ideas that he advocates. He says: "Barnard came very near the right expression when he claimed that the university must be 'a school of all learning that the necessities of the age demand.' Whatever may be the best definition of a university, its functions are clearly to be discovered. It must above all things be a seat of learning, where the most cultivated scholars reside, where libraries, laboratories, and scientific collections are liberally kept up, and where the spirit of inquiry and investigation is perpetually manifested. It must be a shrine to which the outside world will resort for instruction and guidance upon the problems of the day, scientific, literary, educational, political. It must be a place from which are sent forth important contributions to science—theses, memoirs, books. Here every form of scientific investigation should be promoted. Researches too costly for ordinary purses should be prosecuted at the expense of the general chest. Expeditions should be sent forth from time to time to engage in investigations on the seashore or on the mountains. Physical and astronomical instruments of the most improved forms should be devised, procured and frequently renewed. The literatures of all nations, ancient and modern, should have their devotees. Every school of philosophy should be interpreted. Historical and political inquiry should be diligently promoted. The problems of modern society, economical, industrial, financial, administrative, philan-

thropic, demand the most careful examination. All these researches should go forward in an atmosphere of repose and leisure, very different from that of business and professional engagements."

GENERAL.

THE *Ithaca Daily Journal* states that there are 179 students enrolled in the Cornell University summer school, exclusive of 40 students in the school of law. A large part of the students—58 per cent.—come from states other than New York.

DURING the last ten years the department of entomology of Cornell University has deferred the regular winter term's work until summer. These summer terms have been largely attended, and by many who are now holding professorships in other colleges or at experiment stations. The present summer term is attended by 18 students, 6 of whom are graduates, and a part of the graduates are professors of entomology in other colleges. Certainly, if insect life and the economic side of entomology are to receive due consideration, this plan of a summer instead of a winter term commends itself. There is also the advantage of not being disturbed by the demands of other subjects. It also makes more advanced work possible.

DR. THADDEUS L. BOLTON, of the faculty of the State Normal School at Worcester, has resigned to accept a position in the State Normal School at San José, Cal., at the head of the department of psychology, pedagogy and training of teachers.

DR. VAUGHAN HARLEY has been appointed to a newly established professorship of pathological chemistry in University College, London.

PROF. PAUL JACOBSON has been called to Berlin to fill the position of General Secretary of the German Chemical Society.

DRS. JOSSE and Kämmerer have been appointed full professors of engineering in the Technical High School of Berlin, and Prof. Schmidt, of Stuttgart, has been made director of the Weather Bureau at Würtemberg in the place of Prof. Mack, who has retired.

Garden and Forest states that the first horticultural school for women in Germany was

opened at Friedenau, near Berlin, in the autumn of 1894, and it will graduate its first class of seven members next fall. One of the graduates will then assume the position of teacher in a similar school recently established at Riga, in Livonia. On the first of October next still another institution of the kind will be opened on the estate of Baroness Barth-Harmating, near Plauen, in Saxony. The courses of study extend over two or three years, and include not only the various branches of horticulture, but also fundamental scientific instruction and such knowledge of business methods as is needed for the successful prosecution of commercial gardening. Emphasis is laid upon the fact that the new work thus made possible for women is suitable for those of the cultivated classes, and not for uneducated or semi-educated rustics.

THE Duke of Devonshire has introduced in the House of Lords a bill, somewhat similar to that introduced by Lord Playfair in the last Parliament, consolidating the educational institutions of London with a view to the establishment of a great university. The report of the Cowper Commission has thus the support of the two English parties, but it is not likely that any progress will be made during the present session of Parliament.

THE issue of *Nature* for July 9th contains an extended article discussing the position of science at Oxford, which takes a somewhat discouraged view of the place of science in the University. It attributes the comparatively small number of students in the school of natural science in part to the lack of scientific instruction in the public schools, which is in turn due to the nature of the examinations required for entrance to the University, and in part to the fact that there are only three science tutors in all the colleges, while the course chosen by the student depends largely on the advice of his tutor.

DISCUSSION AND CORRESPONDENCE.

THE TEACHING OF ANATOMY.

TO THE EDITOR OF SCIENCE: It seems to me proper to take some exception to Prof. Mall's paper on this subject, which you quote from in