

specimen of thunny which has been for many years in the museum affords an excellent example of what can be done by judicious painting. The splendid coloring of the Malay python is displayed in a specimen presented by Mr. Rothschild, as well as by a second example, on which an artist was still engaged at the time when this was written. In the reptile gallery, which is in the more forward condition, descriptive labels have already been placed in several of the cases, in which the specimens have been removed from the old hideous sycamore stands and set on sanded ground-work.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Legislature of Michigan has passed a bill appropriating \$171,900 for the Michigan College of Mines at Houghton for the biennium beginning July 1 next. The largest item is one of \$45,000 for the construction of a metallurgical laboratory.

MR. JAMES STILLMAN, of New York, has given \$50,000 to establish a contagious disease ward in Stillman Infirmary, which he founded a year ago at Harvard University.

MR. FREDERICK F. AYER has added \$50,000 to the \$100,000 that he had already given to the Lowell Textile School.

DR. BARTON W. EVERMANN, ichthyologist of the United States Fish Commission, has just returned to Washington from Axton, New York, where he gave a course of twenty-five lectures on 'Fish Culture' and 'Fish and Game Protection' to the juniors and seniors of the New York College of Forestry of Cornell University. The class this year consisted of twenty-two students and is the largest in the history of the college. This course is intended, first, to interest those who are to become foresters in the lakes and streams of the forest, that they may be saved from pollution to the injury of the fishes which inhabit them; and second, to give the students some acquaintance with the mammals, birds, and other animals of the forest, their value, and the necessity for the preservation of those which are not noxious. In addition to the

formal lectures, the students were taken on daily excursions for field observations.

THE Massachusetts Institute of Technology, assisted by several gifts made for the purpose, has established a laboratory of physical chemistry to be opened in September, 1903, which is to be devoted exclusively to research work in that important subject. The laboratory is to be under the directorship of Professor Arthur A. Noyes, with whom will be associated Professors H. M. Goodwin and Willis R. Whitney. The researches will be carried on in large part by a staff of research assistants and associates working under their direction. Every facility will also be offered to advanced students who wish to carry on investigations in this branch of science, either with or without reference to an advanced degree. The research laboratory is to occupy one floor of a new building now being erected for the purpose. It will consist mainly of a series of small laboratories, each of which will afford ample accommodation for two workers, and a well-equipped shop in which a skilled instrument-maker will be regularly employed in making and repairing apparatus for investigation work. Rooms for special purposes—weighing, photographic work, glass-blowing, pure-water distillation, storage of chemical and physical apparatus, and the holding of lectures and seminar meetings—will adjoin the laboratories. The members of the laboratory staff will offer a number of advanced lecture courses and will conduct several seminars on physico-chemical subjects which will be open to all those connected with the laboratory. An announcement of these courses is made in the program of the Research Laboratory issued by the institute.

At a meeting on May 18 of the Court of Governors of University College, Sheffield, the Duke of Norfolk presiding, resolutions were adopted to the effect that in the interests of higher education in the city and district it was essential that Sheffield College should have the powers and *status* of a university similar to those granted to Birmingham, Liverpool and Manchester, and also that application should be made to the Privy Council for a charter.

THE report of the Mathematical Pass Examinations Syndicate, at Cambridge University, appointed in December, 1902, has been issued, dealing with the mathematical subjects of the previous examination. According to the London *Times* the report makes important recommendations as regards the treatment of geometry. Hitherto Euclid's elements has been the universal text-book, and Euclid's sequences, if not his actual proofs, have been insisted on. Should the senate accept this report, all this will be changed. In the proofs of theorems any proof which forms part of a systematic treatment of the subject will be accepted, so that teachers will be free to use any text-books. As most of the theorems in the schedule to the syndicate's report are to be found in Euclid, many teachers will no doubt adhere to the old method. Another novelty in the schedule is the introduction of questions in practical geometry involving the use of mathematical instruments. For some years changes more or less of this character have been recommended by a committee of the Mathematical Association and a committee of the British Association. With regard to arithmetic, there will not be required a knowledge of recurring decimals and of the process of extracting cube root, but the use of algebraical symbols and processes will be permitted. These changes are unanimously approved of by a very strong syndicate, consisting of the leading resident mathematicians—viz., Mr. Charles Smith, Master of Sidney, Professor Forsyth, Dr. Hobson, Mr. Mollison, Mr. C. A. E. Pollock, Mr. Welsh, Mr. G. B. Mathews, Mr. S. Barnard, Mr. W. M. Coates, Mr. E. T. Whittaker and Mr. A. W. Siddons. It is proposed that the first examination under the new regulations should be held in December, 1904. The proposal as to algebra is not approved by Mr. Coates. At a meeting of the members of the senate, there was almost entire unanimity in favor of the recommendations, the criticism being confined to points of detail. Some of the suggestions will probably be accepted, but the acceptance of the report by the senate is practically assured.

THE question of the expediency of main-

taining the Engineering College at Coopers Hill, as a government institution for the supply of officers to the Public Works Department in India, having again been raised, the Secretary of State for India has appointed a committee to inquire and report to him on this subject. It will be composed as follows: Sir Charles Crosthwaite, late Lieutenant-Governor of the North-Western Provinces and member of the Council of India, chairman; Sir James Mackay, G.C.M.G., Sir William Arrol, M.P., Sir Arthur Rücker, principal of the University of London, and Sir Thomas Higham, K.C.I.E., late of the Indian Public Works Department, with Mr. J. E. Ferard, of the India Office, as secretary.

WASHINGTON UNIVERSITY is extending its teaching force for the coming year by adding an instructor in mathematics, and a professor of psychology and pedagogy.

DR. JOHN GORDON, president of Tabor College, has received an offer of the presidency of Howard University, at Washington, D. C.

DR. L. A. PARSONS, of the Johns Hopkins University, has been appointed assistant in physics at the University of Utah.

DR. S. M. COULTER has been promoted from instructor to assistant professor in the Shaw School of Botany in Washington University, and has been given an additional assistant.

MR. LEWIS A. DARLING, of the University of Nevada, has been appointed instructor in mechanical engineering in Stanford University and will take part of the mechanical engineering work of Professor G. H. Marx, who goes to Europe on a year's leave of absence.

DR. GEORGE WALTER STEWART, instructor in physics at Cornell University, has been appointed assistant professor of physics in charge of the department at the University of North Dakota.

DR. PHILIP HENRY PYE-SMITH, M.D., F.R.S., has been appointed vice-chancellor of the University of London for the remainder of the year for which Dr. Robertson (now Bishop of Exeter) was appointed in June, 1902.