The building is by far the best constructed, not only of the University buildings, but of all the State buildings. The first floor is finished in hard pine, with two-inch hard maple floor laid in cement. One of the laboratory rooms is provided with three stone piers, extending directly into the ground with tops 20x24 inches. This same room has six windows, each  $7\frac{1}{2}x4\frac{1}{2}$  feet. Double shades, white and black, regulate the light. One hundred and fifteen students are now taking work in psychology in the University of Nebraska.

## UNIVERSITY AND EDUCATIONAL NEWS.

GROUND has been broken for the first of the four buildings of the new biological school of the University of Chicago, which is to be erected with part of the \$1,000,000 recently given by Miss Culver. It is proposed to erect special buildings for zoölogy, botany, anatomy and physiology, instead of one biological building, as planned before the receipt of Miss Culver's gift.

The College of New Jersey, Princeton, will celebrate the 150th anniversary of its foundation in October next. It is proposed to hold an academic festival on October 20, 21 and 22, at which time it is said the name of the institution will be altered to Princeton University. An effort will be made to largely increase the endowment of the College, the money to be used chiefly in developing the University work.

ELIZA M. MOSHER, M. D., of Brookly, N. Y., has been appointed a professor of hygiene in the University of Michigan.

THE Fellows of the Royal College of Surgeons, London, on January 2, declared themselves, by a vote of 72 to 10, in favor of admitting women to the examinations and diplomas of the College.

VASSAR College has received \$8,000 from Miss Helen Gould for the foundation of a scholarship.

THE Senate of Toronto University has made a claim against the Province of Ontario, or the Dominion of Canada, for more than \$100,000.

THE University of Pennsylvania has received a gift of \$5,000 from Mr. Charles M. Swain and \$5,000 anonymously, the money to be used without restrictions.

THE will of the late Martin Brimmer, of Boston, to take effect on the death of his wife, bequeaths \$50,000 to Harvard University.

## DISCUSSION AND CORRESPONDENCE. THE METRIC SYSTEM.

EDITOR OF SCIENCE: I enclose a copy of House Bill No. 2758 in regard to the Metric System. This bill has been introduced by Hon. D. Harley, of Brooklyn, N. Y., after consultation with the Secretary of the American Metrological Society and officers of the U. S. Government (Gen. Duffield, Superintendent of U. S. Coast and Geodetic Survey; Professor Newcomb, of the Nautical Almanac Office, and Mr. Tittmann, of the Coast and Geodetic Survey), and others. The Committee on Coinage, Weights and Measures, of the House of Representatives, has the bill in charge. Hon. C. W. Stone is Chairman of the Committee.

It is hoped that those interested in the matter will urge on the Committee the great desirableness of a favorable report to the House.

J. K. Rees.

AMERICAN METROLOGICAL SOCIETY,
OFFICE OF SECRETARY,
NEW YORK, January 24, 1896.

The bill to fix the standard of weights and measures by the adoption of the metric system of weights and measures is as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the first day of July, eighteen hundred and ninety-seven, all the Departments of the Government of the United States, in transaction of all business requiring the use of weight and measurement, shall employ and use only the weights and measures of the metric system, as legalized by Act of Congress approved July twenty-eighth, eighteen hundred and sixty-six.

"SEC. 2. That from and after the first day of July, eighteen hundred and ninety-nine, the metric system of weights and measures shall be the only legal system of weights and measures recognized in the United States.

"SEC. 3. That the tables in the schedules annexed to the bill authorizing the use of the metric system of weights and measures, passed July twenty-eighth, eighteen hundred and sixtysix, shall be the tables of equivalents which may be lawfully used for computing, determining, and expressing in customary weights and measures the weights and measures of the metric system."

## IMPROVED BLACKBOARD.

EDITOR OF SCIENCE: Several persons have enquired about the blackboard mentioned in your columns recently. May I describe it briefly: A sheet of ground glass a meter square is framed and the frame is hinged into a very shallow cupboard fastened to the wall. A false bottom covered with padded serge fits this cupboard loosely, and when the door is closed and fastened presses firmly against the glass on the inside. It then forms a fine blackboard as the ground glass surface is perfect for use with crayons.

If the door be opened and a sheet of white paper fastened to the false bottom by thumb tacks, it becomes an equally useful drawing slate for colored crayons. If in the place of the white paper a sheet of drawings as of crystal forms or geometrical figures, or outline maps be put behind the glass they show through so that all modifications of the primary form beneath can be drawn on the glass and in proper relation to this primary. It is only needful that the false bottom shall press firmly against the glass, and this is easily effected by having it held in place by four screws placed near the corners whose heads are countersunk in the false bottom. The latter moves freely on these screws and four spiral springs which are slid on the screws behind it press the serge firmly against BEN. K. EMERSON. the glass.

AMHERST, MASS., January 14, 1896.

## SCIENTIFIC LITERATURE.

Elementary Physical Geography. By RALPH S. TARR. 12 mo., pp. l-xxxl., 1-488, 29 plates and charts, 267 diagrams and photographs. Macmillan & Co. 1895. Price \$1.40.

Physical geography is no longer a mere description of the earth's surface, but includes also an enquiry as to how its features came to be what they are. The recent ideas that have vivified this study and placed it on a scientific

basis may be seen by contrasting the writings of Ritter, Humboldt, Guyot and others of what may in all courtesy be termed the old school, with the book before us. In the older books, which are by many persons still considered fountains of geographical knowledge, the leading theme is the description of the earth; in Tarr's physical geography the dominant idea is how the features of the earth came to have their present characteristics.

In descriptive physical geography the continents are sometimes treated as fragments of broken china, which, by the exercise of much ingenuity and an active imagination, are made to fit together with more or less accuracy, thus leading the student to fancy that at one time they were united. In rational physical geography each continent is shown to have a life history, and to have been modified by elevation and subsidence, and varied in relief by erosion and sedimentation. In the modern view of nature even the largest of land masses are found to be unstable forms; the processes to which they owe their elevation above the sea, as well as their outlines and relief, are still active, and additional changes are to come. Mountains are no longer to be studied as finished forms, but as representing all stages of growth, adolescence, maturity and old age. River valleys are not merely drainage canals, the lengths and breadths of which are to be memorized, but each one has a history written in its terraces and flood plains, in which evidences of elevation and depression of the land, climatic changes, the influence of rock structure, etc., can be read.

The modern ideas referred to, which, so to speak, have blown away the mist from the landscape and revealed its varied beauties, are truthfully reflected in the book before us. One who is familiar with the progress of geological study in America sees, as he turns its pages, an epitome of the results brought by many conscientious workers from the mountains and valleys, with much labor and thought. Most of all, it is flavored with the studies of Prof. Davis, of Harvard, in whose class room and from whose writings Prof. Tarr has gained much of his inspiration. The great sources both of facts and ideas, as must of necessity be the case in