applied the bolometer, invented by Langley, to the problem of lunar temperatures and showed that at lunar midday the moon's surface, unprotected by an atmosphere, rose to a temperature exceeding that of boiling water, while at night the temperature fell far below the freezing point.

This was the pioneer effort in the measurement of the surface temperatures of the moon and planets which have since been carried on so successfully by Slipher, Coblentz and others. Our knowledge of the absorption of solar heat by our atmosphere, in spite of the large amount of work on its investigation, is still largely undeveloped, so that Very's work stands to point the way to others.

Very was of a philosophical temperament and he was never so happy as when speculating on the great problems of the universe. His conclusions were frequently out of the ordinary beat and there were sometimes developed sharp differences with his fellow investigators, but he amiably took these differences as part of what was to be expected in life and went on uninterruptedly with his tasks.

He was profoundly impressed by the contributions of Swedenborg to philosophy, science and religion and during the last years of his life was engaged in explaining these contributions in the language of modern science.

His task in life was to enlarge the boundaries of human knowledge and to show that there was no conflict between science and religion. He worked with these ideals ever in view.

H. H. CLAYTON

CANTON, MASS.

SCIENTIFIC EVENTS

BUILDING PROGRAM OF THE U. S. DEPARTMENT OF AGRICULTURE

THE plans for the building program for the U. S. Department of Agriculture in Washington were announced by the Treasury Department on November 16, according to a statement in the *Official Record* of the department. They indicate that when the whole program is completed the Department of Agriculture will be housed in one of the largest office structures in the world. Bids were opened on December 8 for the excavation work for the building, which will connect the present east and west wings. This unit will be the first to be built under the plans. The Department of Justice is arranging for condemnation proceedings for the acquisition by the government of the first of three squares of private property which eventually will be occupied by the structure. These three squares are those between B and C Streets and between Fourteenth and Twelfth Streets, S. W.

The plans call for an extensible building, one that may be added to indefinitely according to requirements for space in the future. The unit that is to be built first, the one filling in between the present east and west wings, will complete the façade on the Mall. B Street will not be closed. On the south side of B Street, immediately and symmetrically behind the marble structure in the Mall, will be a five-story unit more than 1,000 feet long over all from east to west. Behind this unit other units will be built as time goes on as the need for more space requires. The extensible building will follow a gridiron scheme with an axis perpendicular to the center of the administration unit in the Mall.

The extensible building will run from Fourteenth Street to Twelfth Street. Eventually Linworth Place and Thirteenth Street between B and C Streets will be closed and the space occupied by the buildings and its courts.

Although the extensible building will be less monumental in nature than the administration building in the Mall, it will have a north façade along B Street of impressive dignity.

The new central unit connecting the present wings is to cost not more than $2,000,000, and the congress has appropriated $400,000 toward this particular part of the program. For the total cost of site and construction of the extensible building south of B Street congress has authorized a total expenditure of $5,750,000 and has already appropriated $1,200,000 of this amount.

The new unit which is to join the wings is to be about 176 by 170 feet on the ground and that unit of the extensible building which will be built first will be 241 feet by 483 feet on the ground.

GUIDE-LECTURE TOURS AT THE FIELD MUSEUM

BEGINNING on December 1 a new system of guide-lecture tours was instituted at the Field Museum of Natural History, according to an announcement by D. C. Davies, director of the museum.

These tours, a service for which no charge is made, are designed to aid visitors with a limited amount of time at their disposal to find easily and enjoy the best exhibits among the institution's large collections from all ages and all parts of the world, and to assist persons interested in particular subjects to get the most out of the exhibits illustrating those special subjects.

Under the new plan there will be every Thursday, starting at 11 a. m. and 3 p. m., two general tours touching the important exhibits of all four departments of museum exhibits—anthropology, botany,

geology and zoology. These will provide a quick, convenient survey of the most striking features for the visitor who has but little time to spare. The guide lecturers conducting the parties will give informative talks before each of the exhibits.

On the other days when guide-lectures are to be given—Mondays, Tuesdays, Wednesdays and Fridays —individual sections of the museum will be studied, each subject being treated in more detail. Each month a schedule will be drawn up and announced, so that the person with specialized interests may come when his subject is to be taken up. Eventually, under this plan, all sections of the museum will receive this specialized study treatment. Persons with a variety of interests may profitably attend a large part or all of the lectures. Students of high schools, colleges and universities are expected to find the guide-lecture courses particularly valuable as a supplement to their regular studies.

Following is the schedule of guide-lecture tours for December, in addition to the Thursday general tours:

Dec. 2—11:00 A. M., Eskimos.
3:00 P. M., Systematic mammals.
Dec. 5—11:00 A. M., Northwest coast Indians.
3:00 P. M., Precious and base metals; building stones.
Dec. 6—11:00 A. M., Woodland Indians.
3:00 P. M., Plant life.
Dec. 7—11:00 A. M., Great plains Indians.
3:00 P. M., North American and African game animals.
Dec. 9—11:00 A. M., California Indians; nomadic tribes of southwest.
3:00 P. M., Petroleum, coal, clays, sands.
Dec. 12—11:00 A. M., Sedentary tribes of southwest.
3:00 P. M., Skeletons.
Dec. 13—11:00 A. M., Archeology of Mexico.
3:00 P. M., Economic botany.
Dec. 14—11:00 A. M., South American Indians.
3:00 P. M., Systematic minerals and meteorites.
Dec. 15—11:00 A. M., Melanesia.
3:00 P. M., Fish and reptiles.
Dec. 19—11:00 A. M., Italian archeology.
3:00 P. M., Physical geology.
Dec. 20—11:00 A. M., China.
3:00 P. M., Gems.
Dec. 21—11:00 A. M., Tibet.
3:00 P. M., Marine invertebrates.
Dec. 23—11:00 A. M., Children's toys of the world.
3:00 P. M., North American trees.
Dec. 27—11:00 A. M., Reindeer and relatives.
3:00 P. M., Life of birds.
Dec. 28—11:00 A. M., Historical geology.
3:00 P. M., Textiles.
Dec. 30—11:00 A. M., Pewter and glass.
3:00 P. M., Systematic birds.

THE CLEVELAND MEETING OF THE GEOLOGICAL SOCIETY OF AMERICA

THE official program of the mid-winter meeting of the Geological Society of America, to be held in Cleveland, December 29, 30 and 31, has been issued. Three affiliated and closely associated societies, the Paleontological Society, the Mineralogical Society of America and the Society of Economic Geologists, will hold meetings at the same time and place. Section E of the American Association for the Advancement of Science, which will meet at Nashville, announces its program also with this geological group, although its meetings are separate this year.

The program is expected to occupy three days, with almost continuous sessions and many sectional meetings. One hundred titles are listed on the geological society program alone, and the total of the four societies meeting at Cleveland will exceed one hundred and fifty, representing studies in nearly all branches of this earth science.

Major interest this year centers around large tectonic problems as represented by the symposium on "New Data on North American Structures." No less than twenty-five papers deal primarily with structural questions.

The principal addresses will be as follows:

Arthur Keith, president of the Geological Society of America, "Structural Symmetry of North America."

William A. Parks, president of the Paleontological Society, "Some Reflections on Paleontology."

Austin F. Rogers, president of the Mineralogical Society of America, "Natural History of the Silica Minerals."

Frederick L. Ransome, president of the Society of Economic Geologists, "Directions of Progress in Economic Geology."

The annual dinner will be held on Friday evening, December 30, at the Hotel Cleveland, at which time the newly established Penrose medal for distinguished achievement in geologic science will be awarded.

CHARLES P. BERKEY,
Secretary

PRESENTATION OF THE ROYAL SOCIETY MEDALS

THE awards of the Royal Society Medals have already been recorded in SCIENCE. Sir Ernest Rutherford, president of the society, in presenting the medals to Professor A. A. Noyes, Dr. W. D. Coolidge and Professor J. C. McLennan made the following citations:

The Davy Medal, awarded to Professor Arthur Amos Noyes

Professor Noyes's researches have been chiefly concerned with the properties of solutions, in particular of