

— Prof. W. D. Holmes, of the photographic laboratory, Lehigh university, offers a prize of fifty dollars for the best instantaneous shutter for out-door work presented before Feb. 1, 1886. Further information can be obtained of C. W. Canfield, 1321 Broadway, New York.

— The secretary of the treasury has appointed Mr. Artemas Martin of Erie, Penn., librarian of the coast and geodetic survey, having first consolidated the archives with the library. This will be gratifying news to the many readers of *Science* who have long held Artemas Martin in high esteem as a mathematician and a man.

— The December number of the *Botanical gazette* is to be a laboratory number, but will contain, in addition, a full description of the memorial vase presented to Dr. Gray, with illustrations of both sides.

— The fourth series of the 'Johns Hopkins university studies in historical and political science' (beginning in January, 1886) will be chiefly devoted to American city government, state constitutional history, and agrarian topics. Among the monthly monographs will be the following: Dutch village communities on the Hudson River, by Irving Elting; Rhode Island town governments, by William E. Foster; The Narragansett planters, by Edward Channing; Pennsylvania boroughs, by William P. Holcomb; Introduction to state constitutional history, by J. F. Jameson; City government of Baltimore, by John C. Rose; City government of Philadelphia, by Edwin P. Allinson; City government of Chicago, by F. H. Hodder; City government of St. Louis, by Marshall Snow; City government of San Francisco, by Bernard Moses; City government of New York.

— A unique institution is the Anthropological school of Paris. A good idea of its comprehensiveness is gained from its programme for the coming year. There are no less than six courses of lectures. M. Mathias Duval lectures on zoological anthropology, including comparative embryology and kindred topics. General anthropology is in the able hands of Dr. Paul Topinard, whose lectures will centre about the discussion of races and types. M. Manouvrier lectures on ethnology, giving special attention to normal and abnormal craniology. Medical geography, by which is understood the action of the environment, is the subject of a course by M. Bordier. The remaining courses are on Prehistoric anthropology, by M. Gabriel de Mortillet; and on the History of civilizations, by M. Letourneau. The lectures are held weekly, and, in addition, conferences are held from time to time. The course of lectures was begun on Nov. 9.

— Dr. Topinard has published a revised series of anthropometric instructions for travellers. The traveller, he says, need not trouble himself with questions of race, but should merely observe varieties of type. For this purpose he should take measures of as large a number of individuals as practicable, ten different measurements of one hundred individuals being more valuable than fifty of twenty-five persons. The measurements must be so simple as to reduce the personal equation as low as possible. They should also be so arranged as not to keep the subject in one attitude any longer than necessary. Men should be selected for measurement rather than women. All the instruments required may be collected into a small anthropometric box, the slide being the most useful. Dr. Topinard furnishes a form for recording results and remarks.

— M. Mercadier recently described before the Paris academy of sciences experiments undertaken in order to show that the elasticity of the metal diaphragms at the extremity of telephonic wires counts for nothing in the transmission of sonorous vibrations, or rather that it merely gives to the voice the nasal tone associated with telephonic conversation. M. Mercadier successively substituted for such diaphragms plates of greater and greater thickness, pieces of cardboard, and finally iron-filings. The intensity of the vibrations was diminished, but the tone of the voice became normal, and the most delicate inflections were transmitted with perfect exactitude.

BOSTON LETTER.

VISITORS to Boston many years ago were struck by the then novel sight of large labels attached to the stately trees on the Common, designating their scientific and common names and the country of their origin. This simple device for the instruction of the public was almost entirely the work of a single public-spirited man, the late Dr. A. A. Gould, the naturalist, whom more than one generation of Bostonians held in the highest esteem. Snatching the early hours from a laborious practice, he could be seen by early risers tacking his tins upon one tree after another for a whole season. After his death, I think it was, when these had grown dilapidated, some city forester, who, like many others since appointed, had no other than political claim to the place, instead of restoring, removed them. All efforts since made to renew the work have failed until now, when, thanks to the energy of a few interested persons, and the personal attention of Mr. John Robinson of Salem, the Common has again become a good botanical object-lesson.

The terrors of the ravages of white ants in tropical countries came vividly to mind a few years ago, when Dr. Hagen of Cambridge announced material damage to old documents in our State House to be the work of a native white ant. Similar destruction having already been reported in the archives of Springfield, Ill., the matter excited no little concern. There was no question of the damage done, though the state officials were somewhat relieved at finding it mainly concerned ancient tax papers of no other than historic interest, and was confined only to a single apartment. I mention it now only to state that it is to this room that the papers of the Board of health, lunacy, and charity have just been consigned, and that the recent discovery of two large timbers used in the construction of an old house on Beacon Hill, not far from the State House, so riddled by these insects as to render them unfit for further use, shows that the peril was not magnified by the learned entomologist.

One of the most successful efforts made here in recent years for public instruction in science has been carried on under the auspices of the Natural history society, and latterly through the assistance of a portion of the Lowell fund, which has so long supported the Lowell institute courses of lectures. It owes its origin mainly to the deep interest and financial aid of Mr. John Cummings, a vice-president of the Natural history society, and its steady growth to the personal attention of Professor Hyatt, the curator of the society. The Teachers' school of science, as it is called, inaugurated and maintained under these auspices, has now an assured existence, is thoroughly appreciated by the public-school teachers of the vicinity, and has received the warmest praise from the highest school authorities. It has just commenced its fourteenth year with a course of ten lectures, or, more properly speaking, object-lessons, on worms, insects, and vertebrates, by Professor Hyatt, which is to be followed by a mineralogical course given by Professor Crosby. This year Professor Hyatt has had prepared for his course, among other things, two or three hundred dissected kittens, the internal organs being preserved in place and in form by a species of tanning, which renders them as plastic as a kid glove, and permits their free and cleanly handling. In this way, parts which before could only be explained by diagrams, can now be examined by each member of a class, and their relations to all the surrounding parts seen and studied personally (each one is even allowed to retain a set of the objects used), — an advance which will be thoroughly appreciated by every promoter of object teaching. Admission to these lessons is free to teachers holding tickets,

which are distributed on application to the public-school authorities; and the courses are so popular that the society's hall has long been outgrown, and the large Huntington hall of the neighboring Institute of technology has been brought into requisition.

Last week, Wednesday, the veteran botanist, Dr. Asa Gray, celebrated his seventy-fifth birthday. It was made memorable by the presentation to the learned and genial professor — still as active a worker as at forty — of an exquisite silver vase of charming proportions, "in token of the universal esteem of American botanists;" the vase itself being completely covered, above its fluted base, with a floral design, in which, in *repoussé* work, are exquisitely delineated choice flowers of the American flora named for Dr. Gray, or in other ways specially significant of his work, with others which have been his favorites. The idea was originated and carried out by the editors of the *Botanical gazette*, and was a complete surprise to Dr. Gray, who was profoundly moved by this pleasing proof of the general affectionate regard in which he is held by his collaborators. The presentation was entirely informal, and was made by Professor Barnes, one of the editors of the *Gazette*, temporarily residing in Cambridge, who placed it in Dr. Gray's hands, with the personal cards of the 180 botanists who contributed to the vase, many of them accompanied by a few words of congratulation, placed on a silver salver having the inscription: "Bearing the greetings of one hundred and eighty botanists of North America, to Asa Gray, on his seventy-fifth birthday." Among the many other remembrances he received was the following pleasing quatrain sent by Mr. James Russell Lowell:—

"Just Fate, prolong his life, well spent,
Whose indefatigable hours
Have been as gayly innocent,
And fragrant as his flowers!"

The week has also witnessed another event of personal and scientific interest. The dinner given to the designer of the Puritan by the scientific club of the city, to which reference was made in a former letter, came off last Friday, Mr. Burgess having consented to comply with the wishes of his friends. Although the club is a small one, numbering only about sixty members, who meet once a month for a dinner, generally to the number of from twelve to twenty, no less than forty gentlemen, including a few guests, sat down to the table, after which Mr. Burgess entered into a few interesting details concerning the construction of the Puritan.

Y.

Boston, Nov. 23.