cuse University, will have charge of the work in embryology in the College of Medicine.

DR. EDWIN F. NORTHRUP has resigned from the professorship of physics in the University of Texas. The students' paper of the University remarks: "During the brief thirteen years that the University of Texas has been in operation there have been no less than five professors in this school. Their tenure of office has been short, and, in the main, their departures abrupt."

DISCUSSION AND CORRESPONDENCE.

RESIGNATION OF THE DIRECTOR OF LICK OB-SERVATORY.

AFTER a continuous connection with the Lick Observatory for 23 years and a service at Mount Hamilton since 1888, I have terminated my official relations with the Observatory, to take effect on December 31, 1897. My address after October 1st will be as below:

EDWARD S. HOLDEN. SMITHSONIAN INSTITUTION, WASHINGTON., D. C.

THE BOSTON PLANS FOR A NEW YORK BOTAN-ICAL GARDEN.

To the Editor of Science: I wish to call your attention to an inexcusable piece of bad taste in the last number of Garden and Forest. That excellent journal was from its foundation edited by the late William A. Stiles, to whom the public park system of New York is so greatly indebted. It is, however, conducted, whatever that may mean, by Professor C. S. Sargent, director of the Arnold Arboretum. The last number of Garden and Forest, in an editorial notice of Mr. Stiles, gives as his crowning work the following:

"It was his forethought and technical knowledge which have modified and delayed the schemes of the men who in their zeal for a botanic garden are willing to deface, unnecessarily, Bronx Park, and could his life have been prolonged this most valuable and beautiful of all the rural possessions of the city might, perhaps, have been spared for the best enjoyment of the public."

It is well known that Professor Sargent's interference with the well matured and carefully prepared plans for the New York Botanical Garden, as enlarged upon in the daily press, has lessened the public appreciation of an institution so important for the scientific and general welfare of the City. It is commonly reported here that Professor Sargent does not wish New York City to possess a botanic garden superior to the one directed by him. This report is doubtless incorrect, but it will certainly not be silenced by using an obituary notice of a friend in the manner indicated.

You will, I hope, excuse me from giving my name for publication, and will permit me to state that I am in no way connected with the New York Botanical Garden.

N. Y.

NEW YORK CITY, October 16, 1897.

SOURCE OF THE FAMOUS THETFORD LIMBURGITE.

NEARLY half a century ago Dr. Oliver Payson Hubbard, while a member of the faculty of Dartmouth College, discovered large boulders of olivine basalt in Thetford, Vt., and discussed their probable derivation from basaltic areas in Canada.

Some of these boulders have found their way as museum curiosities to Chicago, Washington, New York and New Haven. They are particularly noted for their large rounded masses of olivine and crystalline, grayish green, glassy pyroxene.

In 1894 Dr. E. O Hovey presented to the scientific world, through the columns of the 'Transactions of the New York Academy of Sciences,' valuable information concerning the petrography of these basaltic boulders and referred them to the limburgite division of the family.

Professor J. F. Kemp has commented upon the striking resemblance of olivine diabase to these boulders, and discussed the improbability of a meteoric origin.

It has constantly been conjectured that their source was to the northward, since Vermont is in a region of extensive glaciation from that direction, yet geological research had failed to reveal their origin until last August.

During the summer of 1896, while engaged in field work in stratigraphical geology, I encountered many dikes of diabase rich in olivine, and others of the same microscopical appearance as the typical camptonite in the Pemigewassett Valley, N. H.

By diligent investigation it was my good fortune last August to discover in the locality of these ramifying dikes and the famous Corinth copper mines an extraordinary dike of limburgite, from 6 to 10 feet in width, and penetrating the calciferous mica schist toward the west for more than half a mile.

This limburgite bears individual crystals of olivine two to three inches in length and one to two inches in breadth. A single specimen has been placed in the museum of Dartmouth College containing a crystal of olivine two and one-half inches by one and three-fourths.

Some of the smaller crystals by the oxidation of the iron have become converted into limonite or hematite; others have gone over into serpentine, while a bit of calcite derived from the contiguous orthorhombic pyroxene or the basic plagioclase feldspar is occasionally seen in the cavities once filled by the original olivine crystals.

As the locality is to the northward in the exact direction of the moving ice, and at a distance of only about twenty miles from the famous Thetford boulders, it seems evident that Corinth, Vt., was their original habitat.

C. H. RICHARDSON.

DARTMOUTH COLLEGE.

## MORE DICTIONARY ZOOLOGY.

Some time ago I called attention in your columns to the inaccurate zoological information given by a recently published dictionary. I have just had occasion to examine the *Encyclopædic Dictionary* (Philadelphia, 1896) and should like to ask how the editors explain the following eccentricities:

- (1.) Snail. "H. aspera is also eaten." Helix aspersa is the snail intended; H. aspera is a totally different snail, found in the West Indies.
- (2.) Slug. "A. agrestis, the Red Slug." There is no Arion agrestis. The article, with its errors, appears to have been taken (without acknowledgments) from an old edition of Chambers' Encyclopædia. If the editors had examined the recent edition of that standard work, published several years before 1896, they would have found a different account.

(3.) Coccus. The species assigned to Coccus belong to seven perfectly distinct genera; and no author in the last twenty-five years who has given any study to these insects has used the last century classification of the Encyclopædic Dictionary.

The editors of dictionaries will have to realize that if their zoological definitions and articles are to be accurate and up-to-date they must employ specialists to write or revise them. Until they do so, zoologists should make it their business to call attention to the misrepresentation of their science in works which the public is asked to receive as models of accuracy.

T. D. A. COCKERELL.

SEPTEMBER 25, 1897.

## LANTERN TRANSPARENCIES.

TO THE EDITOR OF SCIENCE: Those who have occasion to have copies of engravings or pictures of any kind made for use with the lantern may be glad to know that such may be printed from the plates used in ordinary printing if sheets of thin transparent celluloid be taken. Gelatin also may be used. The latter is liable to roll up more or less and needs to be protected by inclosing between glass plates of the ordinary size for lantern slides. Celluloid will not trouble so much in that way, yet it is best to mount such pictures in the same way. Photographic half-tones show very well indeed, the fine meshing not being enough magnified nor dense enough to be noticed upon the screen at the distance of a few feet. Such copies need cost but a few cents apiece if the electro can be got to print from, and if celluloid be used without the glass cover perhaps one cent would be the full cost. I enclose a couple of samples that you may judge of the quality of such pictures.

A. E. DOLBEAR.

## DANGERS OF FORMALIN.

To the Editor of Science: Now that the use of formalin for preserving objects for dissection is becoming so common, I think a word of warning as to the danger involved in the use of even attenuated solutions should be given. It is doubtless a matter for the medical faculty to