are those which enter into the most cordial relations with a large body of students.''

IN the June number of the *Journal* of the Boston Society of Medical Sciences Dr. James H. Wright has a paper on the application of color screens to photomicography, in which he shows that by a proper use of filtering light media the clearness and accuracy of photomicrographs may be greatly enhanced.

SOCIETIES AND ACADEMIES.

GEOLOGICAL CONFERENCE AND STUDENTS' CLUB OF HARVARD UNIVERSITY.

Students' Geological Club, May 2, 1899.—Mr. A. W. Grabau gave a *résumé* of the paleontology of the Boston basin.

Geological Conference, May 9, 1889.—Under the title 'Tertiary Granitic Intrusives of the Yellowstone Park,' Dr. T. A. Jaggaer, Jr., reviewed Mr. Arnold Hague's paper on 'The Tertiary Volcanoes of the Absaroka Range' (SCIENCE, IX., pp. 425–442).

Students' Geological Club, May 16, 1899.—At a special meeting of the Club, Mr. L. LaForge exhibited his collection of Chemung fossils.

Geological Conference, May 23, 1899.—Three papers were presented at this final meeting of the year. Mr. A. W. Grabau discussed 'Some Modern Stratigraphic Problems' from a paleontological point of view. He emphasized the importance in paleontological work of the division of marine organisms into Plankton, Nekton, Benthos, Meroplankton and Pseudoplankton, and held that extensive deposits of planktonic organisms enclosed by beds of shallow water origin indicate a period when the land stood at baselevel. Benthonic animals are important as facies fossils, and the benthonic mode of living exerts a great influence in the development of local faunas. Repopulation of a district by a benthonic fauna which has occupied it at an earlier date—through the medium of meroplanktonic larvæ, as demonstrated by Walther—was illustrated by examples drawn from the Hamilton of western New York. Graptolites and Ammonoids, as pseudoplanktonic organisms, are important as index fossils.

Among local or provincial faunas acceleration was considered to be one of the foremost means of differentiating species. Thus, the Fusidæ of the Paris basin appear to have developed independently from those of the Hampshire basin of England. In each area a complete, distinct, phylogenetic series has been discovered. These, although parallel, present specific differences throughout; while certain individuals suggest occasional migrations of species from one basin to the other.

In considering the operation of barriers upon migration the case of the genus *Fulgur* was cited. This gastropod has inhabited the Atlantic coast between Cape Cod and the Gulf of Mexico since Miocene time, its northward and southward migration being prevented by climatic causes, due largely to topographic conditions. That their young are not carried to other similarly characterized shores appears to be due to the fact that the veliger stage is passed in the egg capsule, so that in this gastropod the planktonic larva does not exist.

Mr. H. T. Burr gave 'Results of Recent Studies of the Geology of the Boston Basin,' and Mr. L. LaForge spoke on 'The Relation of Dikes, Joints and Faults in Somerville, Mass.'

J. M. BOUTWELL,
Recording Secretary.

DISCUSSION AND CORRESPONDENCE.

BODY BLIGHT OF PEAR TREES.

IN the spring of 1898 when preliminary studies with* apple canker were begun at this station a few inoculations were made in the limbs of a large pear tree with cultures of *Sphæropsis*, taken from cankered apple limbs. The fungus grew readily at all points of inoculation and produced dead sunken areas of the outer bark, similar to those that are so common on the trunks and larger limbs of pear trees. These definitely outlined and sunken areas of dead bark, commonly known as body blight, have long been thought to be due to the action of the pear blight bacillus. However, it may be pointed out that body blight is preëminently a disease of the outer bark, while with pear blight the reverse is true since the cambium layer is first attacked.

*SCIENCE, Vol. VIII., pp. 595 and 836.