in the forests of the northern Rocky Mountains that all national forest regions have been instructed to develop similar methods of measuring fire danger.

LEO SHAMES

FILMY FERNS IN THE CAROLINAS

No species of the interesting and peculiar group of ferns known as the filmy ferns (Hymenophyllaceae) has ever been found in the Atlantic States north of Georgia. We can now report the occurrence of three of them in the Carolinas, one new to the North American continent. They are: *Hymenophyllum tunbridgense* (L.) J. E. Smith and *Trichomanes Petersii* A. Gray from Pickens County, northwestern South Carolina, and *Trichomanes Boschianum* Sturm from Macon County, southwestern North Carolina. The former is new to North America. The station for *T. Boschianum* near Highlands, N. C., was discovered by Dr. Herbert Hechenbleikner, who was working at the Highlands Laboratory with W. C. Coker. The two South Carolina plants were found by Mrs. Bayard Taylor several years ago. With her and Dr. Taylor, W. C. Coker visited the stations on October 9 of this year and found populous colonies of both of them. All three species were found on granitic gneiss, not on sandstone, as was to be expected.

MARY S. TAYLOR
W. C. COKER

UNIVERSITY OF NORTH CAROLINA

THE WOODS HOLE MARINE BIOLOGICAL LABORATORY

BIOLOGISTS are reminded that one of the sources of income upon which the Marine Biological Laboratory depends for its maintenance is the sale of biological materials by its supply department to educational and scientific institutions.

In spite of the extensive damage to laboratory property caused by the recent storm, the supply department is prepared to fill orders promptly. It will appreciate at this time the opportunity of serving the members of the corporation and other biologists.

By placing your orders for material with the supply department you will, in a substantial way, help the laboratory to repair its very considerable losses.

The damage to the buildings of the Marine Biological Laboratory, caused by the storm of September 21, was almost wholly due to water. The tide in Buzzards Bay rose about 10 feet above the normal high water mark, overflowed the Eel Pond, poured into the supply department building through the windows and doors, and filled the basement of the brick building to a depth of 4 feet. Before the flood abated it had put out of commission the great storage battery and the switchboard, covered microscopes and other apparatus with mud, leaked into many stocks of chemicals, and had ruined cabinets and drawers where much small scientific material was stored. The loss to the supply department was fortunately not large.

Due to the unremitting efforts of those in charge of the various departments, the damage was kept at a minimum. But extensive repairs and replacements will be necessary. This work is already under way. It is confidently expected that the laboratory will soon be completely restored, and that research and instruction will be carried on as usual during the summer of 1939.

CHARLES PACKARD,
Associate Director

SCIENTIFIC BOOKS

LIGHT

Light. Principles and Experiments. By GEORGE S. MONK. Pp. xi + 477, figs. 265. McGraw-Hill Book Company, New York, 1937. Price, $5.00.

THIS text-book gives a combined treatment of three branches of optics which are too frequently separated, namely, geometrical optics, physical optics and laboratory work in both these fields. The first quarter contains a very good summary of geometrical optics: thick lenses, optical instruments, apertures, photometric principles and prism instruments. The principal section on physical optics contains chapters dealing with spectra, optical properties of media, effects of electric and magnetic fields, as well as the usual topics of interference, diffraction and polarization.

It is a pleasure to see that some spectroscopy is included, as this is one of the most important parts of applied optics. Additional experiments might have been outlined, such as those dealing with some of the uses of the quartz spectrograph and infra-red spectrometer. Such work would give valuable experience to the student, especially to one who is majoring in physics or chemistry. In order to provide a better background for such work, it would be advisable to give even more material on spectroscopic theory and nomenclature. In passing, it might be noted that the author makes the mistake of saying that Rydberg's constant varies as the square of the atomic number of the element, whereas perhaps the most important contribution by Rydberg to spectroscopy is the demonstration that this constant is nearly the same for the arc spectra of all elements.

The diffraction grating could have been discussed more fully. The author considers that the theory is so involved that it obscures the final results. However, in this case the vibration polygon method, in which one