ficulties inherent in the study of meteorology, but I believe that such suggestions as those of Professor Franklin are not the best that science has to offer.

CLEVELAND ABBE.

THE SACRAMENTO FOREST.

TO THE EDITOR OF SCIENCE: In south central New Mexico, capping the scarp of the great monoclinal mountain known as the Sacramento, and overlooking to the west the Tularosa desert, is a unique and beautiful forest tract. It forms a detaining mat of vegetation which supplies a large group of running streams and their dependent agriculture. It is, also, a moist and forested resort for the vast desert which encircles it for hundreds of miles. Already 150 miles of railway carry many tourists north from El Paso to picturesque Cloudcroft from all parts of Texas, Arizona and New Mexico; when the scenic beauties of the place are more widely known, the place will become a Mecca for lovers of nature.

The forests consist of pines, firs and balsams, of many species and of great size, trees twenty-five feet in diameter being quite common.

In all there are about twenty-five townships of forested land, some of which is included in the Mescalero Indian reservation.

Saw mills are already at work devastating this little-known but beautiful forest area. The importance of preserving this watershed cannot be too strongly insisted upon and it is hoped that all friends of forestry will use their influence to this end.

ROBERT T. HILL.

October 19, 1901.

THE WORK OF THE BEAUFORT LABORATORY OF THE U. S. FISH COMMISSION.

UNDER the administration of the present commissioner, Hon. Geo. M. Bowers, the facilities for biological investigation at the Beaufort (N. C.) Laboratory of the U. S. Fish Commission are constantly increasing. During the past season the laboratory was open from the middle of May until the end of September, and every reasonable request for equipment was granted. Tables were occupied by the following gentlemen, grouped under the institutions with which they are connected: *Bryn Mawr College*, Professor T. H. Morgan. *Columbia University*, Professor E. B. Wilson, Mr. H. B. Torrey, Mr. J. C. Torrey. *Dartmouth College*, Dr. J. H. Gerould. *Johns Hopkins University*, Professor W. K. Brooks, Dr. Caswell Grave, Mr. R. P. Cowles, Mr. D. H. Tennent, Mr. O. C. Glaser, Mr. R. E. Coker, Mr. J. A. E. Eyster. *University of Alabama*, Professor J. Y. Graham. *University of Missouri*, Professor Geo. Lefevre, Dr. W. C. Curtis. *University of North Carolina*, Professor H. V. Wilson, Mr. C. A. Shore. *Washington and Jefferson College*, Professor Edwin Linton, Mr. C. W. Stone. The investigations carried on were of a varied character, embracing such diverse problems as the systematic zoology and natural history of parasites in edible fish; the effect on the tissues of the oyster of a prevalent trematode parasite; the nature of the food and the rate of growth of planted oysters; the cell-lineage and embryology of *Thalassema;* the embryology of *Chætopterus*, of the oyster, of *Ascidia*, of *Phoronis;* regeneration in *Phoronis;* the metamorphosis of echinids and ophiurans, of barnacles; the systematic zoology of tunicates, of sponges, of echinoderms; cell phenomena in the formation of organs in half and quarter larvæ of sea-urchins.

Many zoologists will be glad to hear that *Phoronis* (*P. architecta* Andrews) turns out to be very abundant at Beaufort. Mr. Cowles has found the form to be a tractable one, living easily in the laboratory and depositing eggs freely. Biologists who are occupied in the study of the fundamental morphogenetic activities of protoplasm will be interested to learn that the delicate striæ which have been described (Conn) as radiating from the surface of the *Thalassema* egg were found (by several observers) to be fine threads, which in places branch and anastomose. With a Zeiss 2 mm., such filaments may easily be seen over the surface of the egg after the formation of the egg membrane, and later over the free surfaces of the first blastomeres. The filaments give every evidence of being protoplasmic, and clearly belong in the category of the 'filose processes' discovered by Mrs. E. A. Andrews ('Spinning Activities of Protoplasm,' *Journ. Morphology*, VII., 2, 1897).

The work of the past season was carried on in the rented building which has served as temporary quarters for the laboratory since its inauguration three years ago. Ground was broken for the new building in September, and another year should see the station in its permanent home. H. V. Wilson.

University of North Carolina,
October 21, 1900.

EXHIBITION OF A STUDENTS' SOCIETY OF SCIENCE.

The Students' Society of Science, formed by and of students in the New York City high schools, held its second annual exhibition on October 11, 1901, at the home of the president. Exhibits were shown in the departments of botany, zoology, conchology, mineralogy, paleontology, geology and anthropology.

The exhibits were in every case explained and described by printed cards. Colored plates prepared by the boys accompanied each collection and showed how the various classifications were made. The collections themselves were prepared so as to show variations of certain properties which defined each group. Thus there were separate divisions in the department of mineralogy, which described and explained each of the several properties of hardness, cleavage, color, refraction and crystallization.

The department of biology presented collections and plates explanatory of the morphological differentiation and evolution of animals, the progressive specialization of the cell, and interesting cases of plant and animal reproduction. Special studies were shown of marine invertebrate zoology, the Arthropoda, and of the structure and anatomy of birds.

The Jones conchological collection, comprising several thousand specimens from all parts of the world, and a large number of selections from the Hawley herbarium, were of particular interest and beauty.

Several large colored plates descriptive of the American fossil beds accompanied the paleontological collection, the gaps in the collection being filled by sketches and plates, which showed a remarkable degree of ingenuity and correctness of knowledge on the part of the young collectors.

The entire exhibition showed what can be done by a few earnest young students of nature who take the trouble to go below the surface of mere collecting for sport. When we consider that the oldest member of this young society is but fifteen years of age, and that they received no outside aid whatever in the preparation of their collections, the result of their work is truly remarkable.

SCIENTIFIC NOTES AND NEWS.

A memorial meeting in honor of the late Henry Augustus Rowland was held at the Johns Hopkins University, on October 16. The principal address was made by Dr. T. C. Mendenhall.

The Sociedad española de Historia Naturel of Madrid has established a new class of *socios honorarios*, limited to ten in number and at a special meeting in March last elected the following eight persons: Sir Archibald Geikie of London, Ph. van Tieghem of Paris, Adolph Engler of Berlin, Santiago Ramón y Cajal of Madrid, Carl Brunner von Wattenwyl of Vienna, Lord Avebury (Sir John Lubbock), of England, Albert Gaudry of Paris and Samuel H. Scudder of Cambridge, Mass.

On the occasion of the celebration of Virchow's eightieth birthday last month, his bust in marble was presented to the Pathological Institute at Berlin.

Dr. Charles E. Munroe, professor of chemistry and dean of graduate studies in Columbian University, has been appointed by the Swedish Academy of Sciences one of the representatives to recommend candidates for the Nobel prize in chemistry.

Dr. and Mrs. T. C. Mendenhall sailed from New York for the Azore Islands on October 29.

Dr. L. O. Howard, chief entomologist of the Department of Agriculture, returned to Washington on October 27 from a protracted tour of California, Oregon, Washington, Idaho, Mexico and Texas, where he has been conducting field investigations and examining the work of field agents.

Dr. Andrew D. White, ambassador to Germany and ex-president of Cornell University, returned to his post in Berlin on October 31.