

faculties 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 *Chaetopterus*, 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).