

earning ability as composed of functional, technical and competing ability, and giving a specific value to each one of the elements of which the bodily organization was composed.

Papers read by title or by abstract were one by E. L. Blackshear, of Prairie View, Texas, on the "American Negro," and another by Alberto Pectorino on "South European Immigration."

JOHN FRANKLIN CROWELL,
Acting Secretary

NEW YORK

SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE sixty-second regular meeting of the society was held at the Ebbitt House, April 23, 1910, at eight o'clock P.M.; President Wm. A. Taylor presided. Robert A. Young and Harry B. Shaw were elected to membership. The following papers were read:

Characteristic Floral Regions of Utah: IVAR TIDESTROM.

With the exception of the region about St. George and possibly along the Colorado River, Utah may be divided into the following floral regions: the river or swamp area, *Scirpetum*; the desert or mesa, *Sarcobatetum*; the foothills, including the lower cañon, *Quercetum*; the aspen region, *Populnetum*; the fir region, *Abietum*; there is no strictly alpine region.

The first mentioned region, *Scirpetum*, is characterized by *Scirpus occidentalis*, which forms dense colonies in places and can be distinguished at some distance by its dark green aspect. There are numerous other aquatic or swamp plants, but the rush is characteristic of the area.

The second region has a number of characteristic plants, among which abound species of *Chrysothamnus* and *Atroplex*, which cover large areas in places. The greasewood, however, is the most characteristic plant of that region, particularly in the saline areas.

In the foothill region are found the piñon and the Utah cedar, and in the cañons, *Quercus utahensis*. The latter is a shrub found at an altitude approximately between 1,500 m. and 2,000 m., and characterizes the *Quercetum*. In this region there occur a number of shrubs, such as *Pera-phyllum*, *Cercocarpus* and others.

On the lower mountain sides *Populus tremuloides* forms a distinct belt. This region is very distinguishable from a distance, especially in the autumn when the leaves of the aspen have turned to a golden yellow, and it is bordered above and

below by the dark cedars or piñons, with the still darker firs above. The aspens ascend the mountain sides to about 2,850 m. and higher under favorable circumstances. Mingled with the aspens and ascending above to 3,000 m. or higher, we find the Englemann spruce and the alpine fir. Both of these trees reach a considerable height in protected places but on the high ridges and summits they are sometimes reduced to mere shrubs.

Arbens lasiocarpa is the characteristic tree of the *Abietum*.

Apparent Mutations in Soil Bacteria: KARL KELLERMAN.

Agricultural Conditions in the Panama Canal Zone: WM. A. TAYLOR.

A general account of the agriculture of the Canal Zone as seen by the writer in a recent visit to that region. The primitive methods in vogue were illustrated by numerous photographs.

W. W. STOCKBERGER,
Corresponding Secretary

THE AMERICAN CHEMICAL SOCIETY NEW YORK SECTION

THE eighth regular meeting of the session of 1909-10 was held at the Chemists' Club on Friday, May 6.

Professor Julius Stieglitz, of the University of Chicago, gave a talk on the "Electrolytic Theory of Oxidation and Reduction." This address was a logical and well-rounded application of the electrolytic theory to all classes of oxidation—by salts, by oxygen, by air, by nitric acid, by permanganate, etc., including oxidation of organic substances like sugar and formaldehyde. The main purpose was to show that this theory can be used in elementary chemistry and as a working basis in any chemist's every-day ideas of oxidation, without any difficulty whatever. The address was illustrated by numerous lecture table experiments.

Preceding Professor Stieglitz's address, the following papers were read:

"On the Action of Crushed Quartz upon Nitrate Solutions," Harrison E. Patten.

"Stilbazoles in the Quinazoline Group," G. D. Beal and M. T. Bogert.

"Estimation of Iodine in Organic Compounds and other Halogens," A. F. Seeker and W. E. Mathewson.

C. M. JOYCE,
Secretary