

SOCIETIES AND ACADEMIES

THE BOTANICAL SOCIETY OF WASHINGTON

THE ninety-second regular meeting of the Botanical Society was held at the Powhatan Hotel on Tuesday evening, December 2, 1913, at which a dinner and special program were given in honor of the seventieth birthday of Dr. Edward Lee Greene, the president, Dr. C. L. Shear, presiding.

Mr. John H. Parker was elected to membership. The program was as follows:

Personal Experiences: MR. FREDERICK V. COVILLE.

Mr. Coville related incidents in connection with his first meeting with Dr. Greene at the Madison Botanical Congress in 1893, and expressed a high appreciation of his work, particularly of his "Landmarks of Botanical History."

Berkeleyan Days: MR. V. K. CHESTNUT.

Mr. Chestnut spoke of his student days at the University of California and of the inspiration received from Dr. Greene by his botanical students.

Botanical Writings: PROFESSOR A. S. HITCHCOCK.

Professor Hitchcock recalled at the International Botanical Congress in 1893 at Madison an incident as illustrating Dr. Greene's taxonomic methods. One day he showed to a group of interested botanists a difference between the two common species of foxtail grass, *Chenopodium viridis* and *C. glauca*. He pointed out that the blades of the first were straight, while those of the second were twisted into a partial spiral. He stated that the reason why these differences were not given in the books was partly from tradition, it not being considered good form to depart very widely from the system of basing differences on the characters of the flowers or fruit; and partly for the reason that the botanists who wrote the books were not sufficiently familiar with the growing plants.

Dr. Greene's first taxonomic paper¹ was entitled "Notes on Certain Silkweeds."

Professor Hitchcock stated that the value of Dr. Greene's contributions to botany or his influence upon botanical thought did not rest solely upon the large number of new species he had described, but that he had studied many groups of plants, had revised many genera, discussed relationships and set on their feet, as it were, species and genera of early authors that had been relegated to oblivion by those that followed.

Reminiscences: MR. IVAR TIDESTROM.

Mr. Tidestrom stated that Dr. Greene began his

botanical career before the Civil War. In 1862, while a young soldier of nineteen in the army of General Grant, he collected a number of plants from the battlefield of Fort Donelson. This collection he sent to his mother, who had them mounted in an album and exhibited at a fair of the Sanitary Commission at Chicago. The collection was sold for \$50 and the money applied for the relief of sick and wounded soldiers.

Dr. Greene, after all the jealousies and personalities have disappeared, should be remembered not for the many species he has diagnosed, but for his unchallenged devotion to botany, for the gathering of an herbarium of nearly 100,000 specimens, and a library of some 3,600 volumes.

Mr. Tidestrom then stated that a few botanists knew the plants of their regions better than any one else, but challenged any one to produce a man who could approach Dr. Greene in the knowledge of plants of the vast empire lying between New York and San Francisco.

Rocky Mountain Flora: PROFESSOR AVEN NELSON.

"I count it singularly fortunate that this interesting event should have happened to occur during my short stay in Washington. I feel doubly delighted in that I am permitted not only to express my personal pleasure by my presence but also to voice for others, as well as myself, the high regard with which we greet the man whom to-night we delight to honor.

"The third part of a great continent, the interior west; the Rocky Mountain region of America, brings its greetings of good-will and love to him to whom its floral wealth is an open book. To every working botanist in this vast field the name of our guest is a familiar word. It matters not whether he be devoted to the technical or the applied phases of the subject at some point in his work every botanist finds the taxonomist's services required. I therefore presume to speak for my colleagues in every experiment station, college and university from Mexico to Manitoba and westward to the sea; and not for my colleagues only but for every amateur who loves the wayside flower for its own sake, as well as for that larger public that loves the woods and fields for their beauty and for their bountiful products. These all send greetings and grateful acknowledgment of the help and pleasure conferred upon them.

"For more than forty years Dr. Greene has loved the plants of the west with a love born of sympathetic, first-hand companionship. To the seemingly barren saline deserts, the chaparral-covered hills, the grassy parks, the dense forests and

¹ *Bot. Gaz.*, 5: 64, 1880.

the alpine heights he is no stranger. Could he leave his more serious tasks long enough he would hasten to greet the floral friends of that earlier day as well as to renew his fatherly interest in the hundreds of plant children of his maturer years. When Edward L. Greene first began tramping over the plains, racing through the valleys or eagerly climbing the unknown heights of Colorado and Wyoming your speaker was still a small boy on an Iowa brush farm. Little did I then think as, plowing corn with old Dobbin, I stopped to pick the cockle-burs from between the toes of my bare feet, that some day I too should be vitally interested in strange and beautiful plants in a, to me, unknown land. But to my friend and teacher (for such I count him in the largest and best sense) they had even then become of absorbing interest. He was gathering specimens in order that he might know the splendid treasures that greeted him at every turn.

"This man, a missionary, in rounding up and corraling for a life of decency and usefulness, the cowboys of the then 'wild and woolly' west, traveled far and wide. He sought men in the open marts and plants in their secluded nooks. The offerings he brought back to the altar were both acceptable, but may it not be that, reversing the order of that primal day, the flowers and fruits of the field yielded more acceptable incense than the firstlings of the flock? I imagine that as the years sped by, he more and more taught men of the wisdom and goodness of the Creator through the marvelous adaptations and beauty of the flora.

"As preaching is teaching and teaching is preaching, so the transition to the professor's chair was an easy one. During the years as they were slipping along, his field of observation widened, his knowledge of plants and their characters deepened, and his theory of the principles of classification ripened. Thus he has gradually been brought into the zenith of his power. Plants from the east and the west, from the north and the south have passed under his observation, but no field has received such discriminating scrutiny as the Rocky Mountains. He knows this field piecemeal; he knows it as a whole.

"And what a flora it is! Some of the states have singly almost as many species as the whole empire east of the Missouri. Environments of greatest diversity as to soil character, water content, heat and light factors, and all these interacting upon each other as they are successively modified by altitudes varying from near sea-level to

alpine heights have given a flora that is marvelous in its complexity. Near relatives of species well fixed under normal and uniform conditions seem here to have been thrown into such a state of 'wobble' that new forms appear to have arisen over night. Multitudinous variations, more or less well fixed, crowd upon each other everywhere. Deery species-making as you will, in the west nature seems to have been working overtime at this very thing and in a very abandon of joy. Then why should not her greater children who have the eyes to see and the mind with which to discern read and record the results?

"In this work Dr. Greene holds and has long held an enviable place. The intimate field knowledge of the earlier decades of his career forms the basis for the discriminating work that is now the marvel and the despair of those of us who have drunk less deeply at the Pierian spring. As we note his facile pen, the classical clearness, brevity and exactness of his diction, the rapier-like thrusts of his criticism, that cut but carry no toxins, one can not help feeling that for a botanist to know little Latin and less Greek is a misfortune—nay almost a crime. Sometimes such an one must wonder whether

'Twere better to have loved and lost
Than never to have loved at all.'

"For our crass ignorance he has scourged us again and again. Though the lash may 'cut to the quick' yet by these stripes are we being healed. They were never meant to drive a man from the field simply because he is a beginner. Dr. Greene always has a word of encouragement for him who enters Flora's temple to worship in the right spirit. He manifests no desire to preempt the place and the 'divine right' of the king is not engraved upon his banner.

"That other eyes fail to see the things that he sees; that even from similar observations different judgments are formed and different conclusions drawn are not to him of such serious moment that each may not go on with friendship for the other, each cultivating his own wee bit of the ever-widening field. To live honestly with nature, to deal justly with your fellow worker, to love mercy is a creed to which we can all subscribe. Were this not true and generally practised, few there be that would dare to follow nature in her devious paths. No single mind can grasp all her secrets. Truth is always truth but she is many-sided. No one pair of eyes can view her from all sides at any one time. A partial truth may in effect, there-

fore, be a complete error, hence error often rides in honesty's carriage.

"Differ as we may as to what constitutes a species, the object of us all is to know plants and to help others to know them. To know and to use plants that they may contribute to our wealth is well; to know them that they may contribute to the health and pleasure of body and mind is better; to know them that we may read a few of God's thoughts after him and thus enrich our souls is best. He who puts us in closer touch with the Creator through his creations is doing a man's work in God's world.

"In conclusion let me say that we have not met to place wreaths upon the brow of our distinguished coworker. There are none which his splendid achievements in systematic, historical and philosophical botany have not already won. His head is already resplendent with a silvery crown. The white is not the frost of many winters. It is the incarnation of the spirit of beauty and service that finds its best expression in spring-time flowers and autumnal fruitage. New radiance is gained at every passing milestone. May there still be many of them. May all the years bring seed-time and harvest in which the fruitage shall be as abundant as in the seven years typified by the seven well-favored, fat-fleshed kine that Pharaoh saw in his dream—fruitage even unto well-filled ears upon every stalk. May no lean kine nor blasted ears devour any of the beautiful years in the life of him who is seventy years young to-night."

Response: DR. GREENE.

Dr. Greene, after expressing his appreciation of the honor accorded him by the Botanical Society, related a few interesting incidents connected with his life.

His first vague impressions were connected with flowers, of roses and geraniums in his mother's window, at the early age of a year and a half. When he was a boy eight years of age the people in the district in which he lived frequently would go to him to find out the names of plants and where certain rare ones could be found.

One of the most interesting incidents that he related was a journey on foot from San Diego, California, to Santa Fé, New Mexico, in the year 1877, when there was not a line of railroad in all southern California, and only a stage line from San Diego to Santa Fé. Before starting out on this venturesome journey* he visited the old cemetery at the San Diego Mission. He said that he

had always loved old graveyards and cloudy weather, and that music with a minor strain appealed to him especially. Among the black crosses in the graveyard was a white marble slab bearing the inscription "Edward L. Greene," with the dates of his birth and death. He who had borne this name had died at Dr. Greene's own age at that time. Dr. Greene wondered if this could be an omen, and whether it meant that he was starting out upon his last journey.

The country from San Diego to Yuma was a difficult one, and he carried only his portfolio and a few changes of socks, sending his money ahead in post office orders. At Yuma he met with a cordial reception, and was invited to hold religious services the next morning after his arrival in a public hall. He remained there over Sunday and Monday. Afterwards he saw in the little newspaper published at Yuma the following notice, concise and to the point in the expressive language of the frontier: "Last Saturday evening the Reverend Edward L. Greene reached Yuma on foot from San Diego. On Sunday morning he preached an excellent sermon to a fair congregation, and another in the evening to a large one. On Tuesday morning, refusing all offers of transportation or financial help, he continued his way eastward. This is solid pluck in big chunks. Boys, get acquainted with him; you will like him, and will find that he is no chicken-eating bumner."

The first Indians he encountered on this journey were standing in a clump of *Covillea* bushes looking at him curiously. Being rather apprehensive, he walked straight to them and fearlessly seized the arms of one of them as though inviting him to wrestle. This Indian, a very tall young man of splendid physique, noticed a ring on Dr. Greene's finger, a ring of red Australian gold. He asked if it were real gold. Dr. Greene took it off his finger and handed it to him, thinking that he would never see it again, but the Indian, after tossing it up and catching it once or twice as if to test its weight, handed the ring back to him.

Dr. Greene reached Silver City in April and remained there three months collecting plants in all directions within a radius of several miles. The only botanist who had preceded him in this locality was Dr. Charles Wright, whose collections had made it classic ground. On one excursion Dr. Greene discovered a beautiful valley about forty miles from Silver City. It was most picturesque and contained cold and hot springs. When he

returned to the nearest settlement he described the marvelous beauty of this valley. A short while afterwards some of his friends, attracted to the valley by his description, camped in the same spot. They were all murdered there by Indians.

On his journey from Silver City to Santa Fé Dr. Greene was overtaken by a man on horseback, an agreeable-looking fellow, dressed in a business suit. He carried two pistols and a rifle slung over his shoulder. At the first stage station the two travelers stayed over night. The stranger seemed to be interested in Dr. Greene and his work. He was a fair-spoken, likable man, with polished manners. Dr. Greene noticed that he carried great rolls of greenbacks bulging from his pockets. Dr. Greene carried about 15 or 20 dollars of his own in a bag swung over his back. The two travelers proceeded onward the next day together. On the road the stranger asked Dr. Greene if he had ever encountered any bandits or outlaws, and said that he himself had spent many days with them in their mountain camps, and that as a rule they were good fellows to be with. The two men parted good friends. Afterwards Dr. Greene learned that his late companion was the leader of a well-known band of robbers.

In 1870 while botanizing on the slope of a snowy range west of Denver in a part of the country not yet settled Dr. Greene started up an inviting valley. After proceeding about a quarter of a mile he saw an Indian on horseback, then another, and another, until there must have been at least 150 Indians in the valley. One, who seemed to be their chief, squared his horse across the path and made signs that he wanted to examine the bag which Dr. Greene carried. When he opened the portfolio and saw nothing but plants he exclaimed, "Ugh! Medicine Man." He then asked Dr. Greene's name, and in return said that his own name was Colorao. This was the name of a notorious chief of the Utes, who was much feared by the whites. Less than three years afterwards this man murdered the entire agency to which the Utes belonged.

In conclusion Dr. Greene again expressed his appreciation of the honor accorded him and of the kind things which had been said regarding the matter of his life's work.

The society also arranged to present Dr. Greene with a book plate as soon as he should approve designs to be submitted by artists.

P. L. RICKER,
Corresponding Secretary

ASSOCIATION OF TEACHERS OF MATHEMATICS IN THE MIDDLE STATES AND MARYLAND

THE twenty-first meeting of the Association of Teachers of Mathematics in the Middle States and Maryland was held at the State Normal College on November 29, 1913. The following program was given:

10 o'clock

Appointment and reports of committees.

"Are Particular Abilities Necessary for the Pupil to Gain an Understanding of the Elementary and Secondary Mathematics as Usually Given at the Present Time," by Maurice J. Babb and Charles F. Wheelock.

Discussion.

"A Comparison at Equal School Ages of the Attainments in Mathematics of the European and American Schoolboy with a Consideration of Causes and Remedies," by James C. Brown.

Discussion.

2 o'clock

"Mathematics as a Means to Culture and Discipline," by Albert Duncan Yocum.

Discussion.

"The Use of the Question in the Classroom," by Romiett Stevens.

Discussion.

The election of officers resulted as follows:

President: Eugene R. Smith, Park School, Baltimore, Md.

Vice-president: Herbert E. Hawkes, Columbia University, New York City.

Secretary: Howard F. Hart, Montclair High School, Montclair, N. J.

Treasurer: E. D. Fitch, De Lancey School, Philadelphia, Pa.

Council Members: Lao. G. Simons, City Normal College, New York City; W. H. Sherk, La Fayette High School, Buffalo, N. Y.

The next meeting will probably be held at New York City in February.

H. F. HART,

Secretary

PHILOSOPHICAL SOCIETY, UNIVERSITY OF VIRGINIA, MATHEMATICAL AND SCIENTIFIC SECTION

THE second meeting of the session 1913-14 was held November 24. Professor Francis H. Smith presented a paper on "The Foucault Pendulum, and its Possibilities as a Convenient Lecture-room Experiment." A form of apparatus capable of quantitative demonstration within the time of 3 minutes was treated.

L. G. HOXTON,

Secretary