

## MICHAEL S. BEBB, ILLINOIS BOTANIST AND LETTER-WRITER\*

EVELYN I. FERNALD

Rockford College, Rockford, Ill.

The letters of Michael Schuck Bebb (1833-1895) are of interest not only to the botanists but to the historians of Illinois. In them are recorded the observations of a man with a keen critical mind and with accurate power of observation combined with a deep love for his fellow men and the world about him. Scraps of wit and humor scattered throughout make them easy to read.

Early in life, in 1861, he corresponded and exchanged plants with the Rev. Joseph Blake, a Maine botanist. In one letter, he gives the following description of himself:

"I herewith hand you my photograph—and here just for a dash at something that may help you to guess what manner of man I am—Hoeffland says if a man knows not at thirty his purpose in life it is probably because he has none—Alas Poor Yorick, I have but six months left wherein to find my purpose—and 'still it is a fleeting.' But I must not spin out so—western man—born and bred—Massachusetts wife—two children—mix-up (strange as the mixture is) farmer—naturalist—musician—like *tough* reading—radical republican (turned insurrectionist) never made a noise in the world—never tried—don't think I should have succeeded if I had—Father a lawyer and politician—here is the end of my sheet, so I must stop."

In another letter to Blake written December 9, 1864 from Washington, he writes in a more serious vein, as follows:

"I will never be much of a botanist but I can enjoy the dear flowers—and the fellowship of true plant-lovers as keenly as the biggest Dr. Hooker of them all—and I question if even he found more satisfaction in working up *Wetwetchia* than have I over my microscope and seeds of *Juncus*—After all perhaps we lose in sentiment and enthusiasm to gain in knowledge and fame without enhancing our enjoyment. It is not best to be such a topping Scientist as to lose one's interest in the

common things of the nearest meadow—I mean of course for humble botanists who seek recreation—and the cultivation of mind and heart—rather than to study and scramble to augment their reputations as Naturalists."

He corresponded with practically all of the prominent botanists of his time and in the library of the Gray Herbarium at Cambridge, Massachusetts, letters to Bebb from eighty-seven contemporaries are deposited. Copies of thirty-two of his letters to the Rev. Joseph Blake were obtained from the University of Maine through the courtesy of Professor F. H. Steinmetz after they had been brought to the author's attention by the generous interest of Professor Neil E. Stevens of the University of Illinois and copies of over two hundred letters to Walter Deane and others from the Gray Herbarium of Harvard University through the courtesy of Professor M. L. Fernald.

By reading these letters you can understand how he was able to accomplish so much work of real value at considerable distance from any other botanists. In the following letter to Walter Deane (February 8, 1888 from Rockford, Illinois), he gives us an explanation of his "technique".

"My tailor has always made two pockets on the hips of my pantaloons. I am too old perhaps to acquire new habits making them useful. I carry no revolver and have a time honored place for my handkerchief. But I have just learned what to do with them and I find they are mighty convenient. I pity people that don't know how to use hip pockets. In one I keep a whole bunch of blank tickets. No matter what I am doing, if it pops into my mind to ask some friend a thousand miles off a question, I out with a ticket, make a memorandum of the question and slip it in the other pocket. So now when I sit down to write to you I go over the accumulation and find two which read as follows 'Deane ask to refer to *Salix Cutleri* Tuck Sillim

\*Address presented by the then-retiring president of the Academy before the membership at its annual meeting held in Galesburg, Illinois, May 2-3-4, 1940.

Journal 45; 36 what reasons there given for discarding the old name *S. Uva Ursi* Pursh—please copy anything likely to be useful."

While in Washington during the Civil War, he became acquainted with William M. Canby and some of the pleasure and stimulus he obtained from that relationship is passed on to Blake, December 9, 1863:

"Yes, Mr. Canby has been very successful—I presume he has told you about our trip to New Jersey—and the East shore of Maryland—We got a fine lot of plants—and thanks to many favoring circumstances made satisfactory specimens. To what new plant do you allude—The *Rynchospora* heretofore confounded with *R. alba*?—Your remarks about finding new species are very just—but I try to keep my mind as free from this whole matter as possible—Envious strife and ambition to possess large herbaria—or to add a species or so to the 100,000 already known tends to embitter the life of a naturalist—and to smother the higher enjoyments he might otherwise derive from his studies—Darwin's observations on the dimorphism in *Linum* are worth a whole batch of new species."

In another letter of February 18, 1863 he mentions another significant contact.

"Dr. Torrey is here lecturing at the Smithsonian on 'Flame' gas light &c.—I was talking with him about our *Oaks* and was glad to hear him say that all the Chestnut group must be put back as Micheaux left it—Certainly no *Western* botanist with a clear idea of species would separate *Q. castanea* and *Q. montana*—for I have often gathered both from the same tree—the former at the top and the latter from the lower branches!"

His time in Washington was not spent entirely in a botanical way, as is indicated in this account sent to Blake, July 16, 1864:

"The capitol is safe. The 'Pension Office Guards' were regularly mustered into the service of the U. S. for thirty days. The Reds got wind of the movement and retreated precipitately! Perhaps the advance of the 6th Army Corps may have contributed to the discomfiture of the enemy, but still the Moral effect (?) of 60 valiant quill drivers ordered to Fort Baker to do garrison duty must have been stunning! Well! now that the

emergency is past and I have retired from active military life—the mails reopened etc. I have taken to the pen—answered all the letters I had lately received, and getting in the way of it I believe I will keep on and stir up some of my delinquent correspondents beginning with your esteemed self."

A very fine account of Bebb was written by Walter Deane of Milton Academy, Milton, Massachusetts, and published in 1896 in the *Botanical Gazette*. (This also includes a complete list of his publications.) They exchanged letters and specimens and were very close friends. It is singular that they never saw each other. They had arranged to meet each other at the Columbian Exposition in Chicago but missed each other by a few days—a great sorrow to both of them.

When the father of Michael, William Bebb, former governor of Illinois, purchased five thousand acres of land in Winnebago County and in 1850 most of the family and belongings were sent via the Miami canal to Sandusky and thence by the Great Lakes to Chicago and overland to Fountindale near Seward in Winnebago County, Michael and a brother drove a herd of cattle the four hundred miles. A glimpse of that trip is thus pictured for us:

"How beautiful the rolling prairies were before man's incoming! You never saw an old fashioned prairie 'breaking plow'—It was drawn by ten huge oxen and cut a furrow 30 inches across—The soil was cut only about two inches thick and was laid over as smooth and even as the boards of a floor. On the 'land side' stood in all the purity and freshness of its pasture beauty the native vegetation—on the other was a black field with not a vestige of living plant to be seen—such an outfit—and there were thousands of them at work all over the country—would destroy in one hour more beautiful plants than have been collected by all the botanists of the state since the Indians were driven out—A few choice things were left on stony knolls where the stones would dull the sharp edge of the breaking plow—or in nooks too irregular in shape to pay for cultivation but even they gave way a few years later to blue grass and cow pasturage—*Troximon* which grew out in the open and upon the richest and sunniest slopes was about the first choice

thing—botanically considered—to be utterly exterminated. I have not seen a plant of it growing in years.”



Fig. 1 (above). Michael Schuck Bebb as a boy, copied from an old daguerrotype loaned by A. S. Ruhl of Rockford, Illinois.

Fig. 2 (below). Fountaindale, Illinois, home of M. S. Bebb.

An old daguerrotype given to Mr. Antes Ruhl of Rockford, Illinois, by members of the Bebb family, represents Bebb as he looked at that time (Fig. 1), and a later photograph (Fig. 2) when he was

in the prime of early manhood.

On the county line road northwest of Rockford and northwest of Byron, the father built a new home, designed by Downing. How spacious the house and grounds were for those early pioneer days is shown in Figures 3 and 4.

Bebb's interest in plants began when he was very young and persisted throughout his life. When Emerson's *Trees and Shrubs of Massachusetts* was added to the family library in Ohio, it was his first real contact with formal botanical science. At this time, he began to collect plants, and the splendid herbarium of 50,000 sheets now in the Field Museum was built from such a simple foundation. Since he did so much of the work in those days without instruction of trained and experienced botanists, the records on many of the earlier sheets are incomplete. However, by the time (1873) he became interested in *Salix*, he had had sufficient opportunity to know more of the established practices in systematic botany.

From 1857 to 1861 he lived in Odin and Salem and the vicinity of Springfield and at these places made extensive collections. From this locality he went to Washington, D.C., where he remained until 1867. At that time he purchased the old homestead at Fountaindale and made his home there or in Rockford until his death in December 1895.

His studies of the difficult genus *Salix* are more valuable because he made observations of living specimens as well as pressed specimens. In a *Salicetum* located near a stream at Fountaindale, he planted willows from all over the world. Dr. Hooker sent 1100 cuttings of 175 species from the willows cultivated at Kew and they all lived. When Charles Sprague Sargent was planting willows at the Arnold Arboretum, Bebb sent cuttings and detailed directions for their arrangement and culture. The following is an extract from a letter to Walter Deane written on February 5, 1892:

"I have been fussing over Willows, my usual winter occupation, and have really become quite enthusiastic. It began with work done in a perfunctory way to discharge obligations to others, but in the prosecution of this, certain fresh lines of investigation had to be followed up

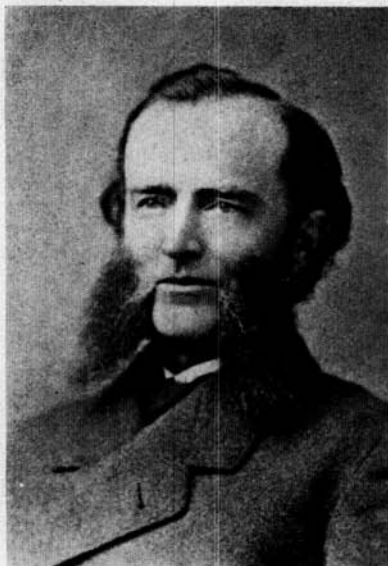


Fig. 3. Michael Schuck Bebb, from a picture loaned by A. S. Ruhl of Rockford, Illinois.



Fig. 4. Fountaindale, Illinois. Home grounds of M. S. Bebb.

and these in the end led to a better understanding of some old questions laid aside as unanswerable. Finding my way Clear I was in fine mood to go on and block out three or four batches of Willow notes for the Gazette. It is only in this way, now, that I can keep up the pleasant illusion that I still belong to the fraternity of working botanists. I envy you your industry and vim, but after all this is only relative. Young Macoun writes that 'his hours are from 8 A. M. till midnight with an hour off for luncheon and dinner' (presumably half an hour for each.) I wrote him that he might work that way in Germany but he had better stop right off or he would get a rap on the head to remind him that the thing couldn't be done in this climate."

Bebb became the world authority on *Salix*. In his early days he devoted some time to *Carex* and corresponded with "that young man Bailey" (Liberty Hyde Bailey).

Among his most important contributions to science are the publication of the Willows of the Peary Auxiliary Expedition in *Bulletin V* of the *Geographical Club of Philadelphia*, of notes and articles in the *Botanical Gazette* and *Garden and Forest*. He selected material

from which Mr. Charles E. Faxon drew the willow plates in Sargent's *Silva of North America* and later criticized the sketches. His death in 1895 prevented the completion of the revision of the willows for the *Flora of North America*.

In his lifetime the appearance of northern Illinois underwent many changes and botanizing became more difficult. On January 28, 1891, he wrote to Walter Deane:

"The electric car lines have been extended in several directions one or two miles beyond the city limits (mainly to boom suburban lots) and will afford me facilities in reaching some very desirable botanizing grounds which last summer were beyond my walking ability. One is the hills above the city on the bank of Rock River which last summer I could only visit twice. Now I can go to within a mile by the cars. The other is one upon which I am counting greatly, viz., the right-of-way of the Chicago & Northwestern R. W. which was fenced in thirty years ago and has of course never been cultivated or pastured since.

"All I have the dread is that Bluegrass will have spread in from the farms alongside and smothered out most of the indigenous vegetation."



On May 22, 1894 he wrote to Walter Deane:

"The boys wanted me to join them in an excursion to a favorite collecting ground of theirs on the lake shore near Whittings, Indiana. I was quite as eager as the rest so one morning we took an early train and did not get back to the city till after dark. We had a walk of a mile and a half along the lake shore, after leaving the R.R. station and then turned off into what was expected to be a region of alternate sand dunes and bogs—heavily wooded in some places,—open and sunny in others—aquatics in the water and the plants of hot sand banks a few rods away. Trees for shade—underbrush for seclusion—where we could cook and eat our dinner with a feeling that we were far removed from man's intermeddling—To the very great

disgust of my entertainers we discovered that the whole district for miles had been taken hold of by a land improvement company. The bogs had all been drained by deep ditches—discharging into the lake—the trees cut down or pulled up by the roots with some powerful machine—and the whole surface *burned over*."

His whole family was actively interested in his botanical work. An intensive study of the plants of Cook County, Illinois was made by his son Robert, and his son William was a well known naturalist in Illinois and Indiana.

In this study of the life of Michael Schuck Bebb we realize more clearly than ever that in the youthful scientists and in the amateur scientists there is much of immeasurable value which should be conserved.