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OF

NATHANIEL LORD BRITTON
1859—1934

BY

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With bibliography by
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To establish one’s self as one of the outstanding productive botanists of his time is an achievement in itself, but it is quite another thing at the same time to develop in connection with one’s active scientific work, an outstanding scientific institution planned to perpetuate and increase research in the field in which the individual was interested. Yet this is the record of accomplishment of the subject of this biographical memoir. As ably expressed by Doctor Marshall A. Howe:

“Opportunity and the man conjoined to make the career of Nathaniel Lord Britton a notable one. The City of New York, spacious and wealthy, was a fitting site for an institution to be devoted to the study of plant sciences and to the public display of plants and plant products of scientific, economic, and horticultural interest. Doctor Britton was the man of vision, energy, and resource, who, above all others, made the dream of a few a living reality. In a very large measure, it was his driving, vitalizing force that, within less than thirty-five years, converted raw materials into the New York Botanical Garden, one of the leading institutions of the kind in the world.”

Born at New Dorp, Staten Island, now the Borough of Richmond of New York City, on January 15, 1859, Doctor Britton died at his home, 2965 Decatur Avenue, New York, June 25, 1934, in the seventy-sixth year of his age. He was the son of [Jasper] Alexander Hamilton Britton and Harriet Lord Turner, and it has been said that his parents hoped that he might follow a clerical career. The interest of a neighbor, John J. Crooke, an individual of considerable scientific attainments himself, led to young Britton’s being sent to the School of Mines in Columbia College, where he was prepared for his future scientific career. Doubtless his early close association with the late Doctor Arthur Hollick, a classmate in the School of Mines, and the influence of Professor John Strong Newberry, Professor of Geology and Mineralogy, and an “old school” naturalist, had their effect on the shaping of Doctor Britton’s future career.
It is probable that Doctor Britton was a descendant of James Britton who came to the American colonies from London in 1635, although it seems likely that the name was of French rather than of English origin. The name is not an uncommon one in the early records of New Jersey and New York. In any case William Britton settled on Staten Island about 1664. In 1695 Nathaniel Britton acquired title to the Obadiah Holmes property in New Dorp, Staten Island, and in 1925 Nathaniel Lord Britton and his wife Elizabeth Gertrude, deeded a part of this land, with the old Britton cottage, to the Staten Island Institute of Arts and Sciences to ensure its preservation as long as possible as an example of early colonial construction.

It is apparent that Doctor Britton's interest in botany developed at an early age, long before he entered college, for it is recorded that even as a child he knew the names of local plants in a way that seemed very mysterious to his parents. In any case, in spite of his collegiate training in geology and mining, the study of plants soon became his dominant interest.

In 1879, before he had reached his twenty-first birthday, he was graduated from the School of Mines of Columbia College with the degree of Engineer of Mines. At that time there was little formal instruction in botany in Columbia College, Professor Newberry giving lectures in both geology and botany. He had published numerous papers on fossil plants and a few on living ones, and naturally encouraged young Britton's botanical interests. Like many others who made their mark in botanical science in the days before the great development of laboratory technique so characteristic of modern botanical training, Dr. Britton's interest was a personal one because of his abiding interest in plants and in plant life. He was to a very considerable degree self-trained in his chosen career. He joined the Torrey Botanical Club in October, 1877, and in the year of his graduation his first extensive botanical paper appeared, this being "The flora of Richmond County, New York," in joint authorship with Arthur Hollick, although he had published shorter botanical notes in 1877 and 1878.

Following his graduation from the School of Mines he was appointed Assistant in Geology under Professor Newberry and
for the five succeeding years he also served as Botanist and Assistant Geologist on the Geological Survey of New Jersey. In 1881 his "Preliminary Catalogue of the Flora of New Jersey" appeared, this apparently serving as his thesis for the degree of Doctor of Philosophy which he received that year from Columbia College. In 1887 he received an appointment as Instructor in Botany and Geology, at Columbia. He even gave courses in zoology in 1887-88. At this time he largely took over Professor Newberry's botanical instruction. In 1890 he was appointed Adjunct Professor of Botany, and in 1891 Professor of Botany. On his appointment as Director-in-Chief of the newly established but as yet unorganized New York Botanical Garden in 1896 he became Professor of Botany Emeritus at the early age of thirty-seven years. Under arrangements perfected between the Garden and Columbia University, the Director of the Garden became, ex-officio, a Professor of Botany in the University.

Doctor Britton was married on August 27, 1885 to Elizabeth Gertrude Knight who materially assisted him in his botanical efforts because of her own abiding interest in botany. Starting with a keen interest in the local flora he gradually extended his field assembling data, perhaps unconsciously at first, but later with the definite motive of preparing the famous Britton and Brown "Illustrated Flora of the Northern United States and Canada" which appeared in three volumes 1896-98; there was a second edition in 1913, and this, forty years after its first publication, is still standard although, of course, revision is now needed. It was the first fully illustrated "Flora" on any part of North America. The preparation of such a work, an enormous task in itself, did not restrict the author's output of other papers, and during much of the period devoted to its preparation Doctor Britton served as editor of the Bulletin of the Torrey Botanical Club (1889-97), the pioneer American botanical periodical.

The illustrated flora project was the joint idea of Doctor Britton and Judge Addison Brown. Its preparation was made possible through funds provided by Judge Brown, but there is every reason to believe that the initial outlay was repaid by royalties from its sale. This reference work, although of course
more or less out of date, is still in demand, with steady annual sales of several hundred copies each year. While Doctor Britton devoted an enormous amount of time to its preparation, Judge Brown worked with him throughout the period of its preparation and publication.

Other outstanding major works include his "Manual of the Flora of the Northern States and Canada" (1901, ed. 2, 1905, ed. 3, 1907), "North American Trees" (1908, with J. A. Shafer), the "Flora of Bermuda" (1918), the "Bahama Flora" (1920, with C. F. Millspaugh), and "The Botany of Porto Rico and the Virgin Islands" (1923-30, with P. Wilson). His *magnum opus*, prepared in association with J. N. Rose, is "The Cactaceae", a four volume, copiously illustrated monograph of this most difficult plant family, published by the Carnegie Institution of Washington, 1919-23. In this work 124 genera and about 1,237 species of this perplexing family are described. No matter what future botanists may attempt or achieve in their consideration of this great family of plants, this Britton and Rose monograph forms a datum plane from which all future work must proceed.

Doctor Britton became interested in the flora of the West Indies at an early date, the first expedition being sent by the Garden in 1898, his own first field trip being in 1901. He participated personally in at least thirty botanical expeditions in the islands, for he was convinced that exploration of this region would be most fruitful. Most of this West Indian work was financed by him personally. In connection with the problem of financing field work he was most successful in developing cooperative expeditions whereby several institutions contributed to the expenses of field parties, the resulting collections being equitably divided among the cooperating units.

Throughout his productive life, Doctor Britton was a voluminous writer. In his earlier career, teaching duties, while of course taking time, were not allowed to restrict his productive activity, for it should be remembered that it was Britton who established and organized the Department of Botany in Columbia University. When he took charge he found very inadequate literary facilities, comprising not more than 1000 volumes. The
valuable herbarium established by Doctor John Torrey, rich in types and historical material, was in the greatest disorder, suffering from neglect, and in utterly inadequate quarters. He undertook, with the greatest zeal and energy, the task of correlating the scattered elements into one series of botanical specimens and the building up of a botanical library worthy of the University. Within a few years the herbarium was more than tripled in size and the botanical library was vastly increased. Later, when charged with very heavy organization and administrative duties at the New York Botanical Garden, we find the same situation to prevail; nothing was permitted unduly to interfere with his productive output in botany. One marvels at his energy, his ceaseless mental activity, and at the diverse productive results.

In view of the comprehensive bibliography appended to this paper there is little need to go into detail regarding Doctor Britton's publishing activities. The long list speaks for itself. Others unhampered by exacting demands on their time by social duties, political contacts, appeals for funds, dealings with architects, engineers, city and corporation officials, and a thousand and one details appertaining to the establishment, financing, and development of a great institution may look with equanimity on their productive output in publication. Yet one wonders how many of them could have continued to be productive had they been faced with the multitudinal problems, large and small, that Doctor Britton met day after day, week after week, month after month, year in and year out, and still find time to produce technical paper after technical paper. It takes a rare combination of qualities, and above all persistence, abiding faith in one's work, and deep and unfaltering interest in the daily task to produce results under such circumstances, and these qualities were Doctor Britton's to an eminent degree. He worked unceasingly himself and he expected his associates to do likewise. Above all he provided the opportunities for his associates to accomplish that in which they were individually interested through his organizing and administrative ability.

After all is said and done, in spite of Doctor Britton's notable contributions to botanical science, his greatest achievement was
undoubtedly the establishment and development of the New York Botanical Garden, a living monument to his memory. The institution was his in a very real sense, and to it he devoted his best efforts through much of his productive life.

Doctor Britton himself is the authority for the statement that the idea of establishing such an institution was due to a remark made by Mrs. Britton in 1888, when they were visiting the Royal Botanic Gardens at Kew, to the effect “Why couldn’t we have something like this in New York?” On October 24, 1888, Mrs. Britton gave a description of Kew at a meeting of the Torrey Botanical Club, and at the next meeting of the Club a special committee was appointed, of which Doctor Britton was a member, to consider what might be done in reference to the establishment of a botanical garden in New York. On January 8, 1889, an appeal for such a garden, prepared by the committee, was adopted and ordered printed. How many potentially great projects stop here. The situation has been ably presented by Doctor H. H. Rusby.*

“Doctor Britton’s accomplishment in the establishment of our Botanical Garden is not likely to fail of appreciation by future generations, but they might easily fail to appreciate the difficulties attending such a vast work on such insufficient resources. Looking back on the conditions that confronted the enterprise, they seem appalling, and the undertaking hopeless—yet—here is the garden, just pride of a nation! None of the enthusiastic botanical band, with the exception of Judge Brown, possessed enough means to justify even the starting of a subscription list, and but a very few of them had wealthy associates who might become interested. Again it was Doctor Britton who succeeded in inducing those few to initiate a campaign for funds. For years, the attempt persisted, but the work lagged and it was not until a determined group of women, led by Mrs. Britton, took to the warpath, that the minimum endowment of $250,000 was secured, and of this only the income might be used. Money for grading, road, path and bridge building, the location of lakes and the erection of buildings and conservatories, had still to be secured from the city administration.”

Following the adoption of the committee report by the Torrey Botanical Club January 8, 1889, the consent of the Department

* Science n. s. 80: 108-111. 1934.
of Parks was secured providing for the establishment of the proposed garden could means for its maintenance be procured. The corporation known as "The New York Botanical Garden" was chartered by special enactment of the New York Legislature effective April 28, 1891. The list of incorporators included the names of forty-eight distinguished citizens of New York. The Act authorized and directed the Park Commissioners to set aside for the proposed garden an area not exceeding 250 acres in some park north of the Harlem River, if, within seven years, the corporation should procure by subscription an initial endowment of not less than $250,000.

About four years later, when the required amount had been subscribed, the Park Commission was requested to set aside 250 acres in Bronx Park as a garden site, and the Board of Estimate was requested to appropriate $500,000 for the erection of suitable buildings, as had been made mandatory by the Act of the state legislature. The officers of the first Board of Managers consisted of Cornelius Vanderbilt, President; Andrew Carnegie, Vice-president; J. Pierpont Morgan, Treasurer; and N. L. Britton, Secretary.

In New York City there are several quasi-city units of great cultural value to the community. They are in part supported by direct city appropriations, in part by income from their endowments, and by gifts from philanthropically minded citizens; all are under the control of their own governing boards. Already established and in operation on this principle were the Metropolitan Museum of Art, the American Museum of Natural History, the New York Public Library, and the Brooklyn Institute of Arts and Sciences. To this category was now added the New York Botanical Garden, another orphan, adopted by and in part supported by the City; and soon after this (in 1895) the New York Zoological Park.

Late in 1895 or early in 1896 an agreement was made with Columbia College whereby the herbarium and botanical library of that institution were to be deposited at the Garden, the facilities of the Garden to be made available to the faculty and advanced students of Columbia College. On June 17, 1896, Doctor Britton was formally appointed Director-in-Chief of the new
institution. The garden site, 250 acres, in Bronx Park had been set aside in July 1895, to be increased in 1915 to an area of nearly 400 acres.

The challenge that Doctor Britton met was 250 acres of raw undeveloped land, no roads, bridges, fences, or buildings, an assured endowment of $250,000 of which the income only could be used, no laboratories, library, or herbarium, no staff, but with the hope of some financial support from the city and the potential hope that citizens of means would by gift or bequest, help support the infant institution. How well he met the challenge may be briefly indicated by the statement that in the thirty-three years of his directorate he saw the Garden develop from an idea to a well developed tract of 400 acres, a commodious administrative building and museum, ample greenhouse and conservatory facilities, a great collection of books containing 43,500 bound volumes, one of the great botanical libraries of the world, a reference herbarium in excess of 1,700,000 specimens from all parts of the world, well equipped laboratories, an active and productive staff, a publishing institution sending its product to the ends of the world, its initial endowment of $250,000 increased to approximately $2,500,000, an auxiliary membership (annual, supporting, and life) of nearly 2000 individuals, and its annual city appropriation greatly increased. The end attained justified the faith of the moving spirit in the enterprise, but how many men, situated as Doctor Britton was in 1895, would have had the courage to accept the challenge, and had the faith that the desired end could be accomplished?

One marvels at the early and rapid expansion of this new institution, particularly when one considers the paucity of financial support in the early critical years. As expressed by Doctor Rusby, who also quotes the expression that in those early years every dollar of the Garden’s funds was made to do the work of four: “This success, in carrying the garden through its lean early decades, could never have been accomplished but for the generous and self-denying support of as loyal a staff as has ever blessed any similar institution, and this devotion was in no small degree attributable to the director’s personality.” Explorations were initiated in various parts of North America, in the Philip-
pines, in the West Indies, and in South America. A well-rounded research program, not confined to the taxonomy of the flowering plants and cellular cryptogams was rapidly developed, including plant physiology, plant pathology, palaeobotany, and popular education. Manuals were prepared covering the floras of the northeastern United States, the southeastern States, and the Rocky Mountain region. Soon there appeared in the periodical field the "Journal" and the "Bulletin" of the New York Botanical Garden, a series of "Contributions," and the "Memoirs," somewhat later to be followed by the establishment of "Mycologia" and "Addisonia." As early as 1901 work on the preparation of the "North American Flora" was initiated, originally planned to be completed in thirty volumes. Intended as a descriptive flora to cover all known North American species of plants in all groups from Alaska and Greenland to the West Indies and Panama, seventy-four parts were published in Doctor Britton's lifetime. This extensive undertaking was due in large part to Doctor Britton's initiative, the work being done by members of the staff of the New York Botanical Garden, with important contributions from botanists in other institutions. As another indication of his keen insight into what is necessary in a publishing botanical institution he pioneered again in creating the position of bibliographer on the staff, the first position of the kind, it is believed, in any botanical institution.

Doctor Britton's personal interests in the development of the work of the Botanical Garden were particularly strong in the building up of the very comprehensive botanical library and the great reference herbarium. He did not limit the accessions to publications and material appertaining particularly to the problems or to the areas in which he was personally interested. He took an exceedingly catholic viewpoint, in his desire to make the conditions as to material and literature of equal value to all staff members regardless of their fields of special interest. To the library he presented all published material that was personally sent to him by correspondents from all over the world, and freely used his own personal funds and secured funds from various other sources to acquire important sets of plants and private
Herbaria as they became available to enrich the reference collections, and books to enrich the library.

His breadth of view is illustrated by the plan originated and consummated by him of bringing together in one place the scattered herbaria and botanical literature in New York, at the Garden, including the historical Torrey herbarium and the general herbarium of Columbia University, that of Barnard College, and the herbarium of the American Museum of Natural History. His interest was not limited to the higher plants as witnessed by his fortunately consummated plans of acquiring for the Garden the very important Ellis and Everhart collection of fungi, and the magnificent Mitten collection of mosses, both collections being exceedingly rich in historical material and containing many thousands of types. In the library field he planned and consummated the purchase of all the botanical works in the library of the Conservatoire et Jardin botaniques de Genève that were duplicated when the very important DeCandolle library was presented to the latter institution, thus vastly increasing the library resources of the New York Botanical Garden.

Outside of the library and herbarium interests of Doctor Britton was the field of palaeobotany. He took advantage of the opportunity of broadening the field of the New York Botanical Garden by establishing palaeobotanical work at the Garden, fully realizing, as apparently others have not done, that palaeobotanical research can best be done in close association with a great reference herbarium. In developing this field he naturally turned to his early associate Doctor Arthur Hollick, giving him the opportunity of developing this special field of investigation at the Botanical Garden. In no other botanical institution in America, and in very few elsewhere, was the field of research so broadly planned and developed as under Doctor Britton's leadership at this, the youngest and yet one of the greatest, botanical gardens in the world.

Doctor Britton was naturally the recipient of many honors, but honors rested lightly on his shoulders. He was the recipient of the Sc.D. degree from Columbia University in 1904, and the L.L.D. degree from the University of Pittsburgh in 1912. He was elected a Fellow of the American Academy of Arts and
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Sciences in 1925, a member of the National Academy of Sciences in 1914, a member of the American Philosophical Society in 1928, and a foreign member of the Linnean Society of London in 1925. He served as Vice President of the American Association for the Advancement of Science in 1896, President of the Botanical Society of America in 1898 and in 1920, President of the New York Academy of Science in 1907, and was made honorary president of the International Desert Conservation League in 1930. He was chairman of the Scientific Survey of Porto Rico and the Virgin Islands from its organization, at his instigation, by the New York Academy of Sciences, until his death. In the latter part of 1934, a peak 3200 feet high in the Luquello National Park in Porto Rico was named Mount Britton in his honor, in appreciation of his many years of service in developing our biological and geological knowledge of Porto Rico.

Although slight in build and of frail physique, Doctor Britton was a man of tireless energy, quick to perceive and to execute what needed to be done, with a remarkably retentive memory, a highly developed faculty for order and dispatch, and with the gift of concise expression. He was an individual of pronounced ideas, and in the often acrid nomenclatural controversies of the last decade of the last century and the first decades of the present one, he was an outstanding champion of strict priority in publication and a strong exponent of the so-called “American” code of botanical nomenclature as contrasted to the international rules. As a result his own publications and most of those prepared by his associates in New York were issued under the “American” code. Many botanists frankly admit that certain provisions of the “American” code were superior to the original provisions of the International code. The two are now so measurably close, except on the two questions of conserved generic names and Latin diagnoses, that the acrid controversies of the productive years of Doctor Britton's botanical career are now but a memory. Differences of opinion could not be avoided between exponents of the conservative viewpoint in nomenclature and the progressive or liberal element, and Dr. Britton was a consistent liberal.

While Doctor Britton would be considered conservative in the
matter of delimiting species, in generic segregation he was extreme, rather than conservative, tending to separate genera on what many botanists consider to be slight characters. Essentially, genera and species being subjective concepts, rather than objective realities, no such thing as legislative authority, as to what shall constitute the limits of a genus or a species, is possible. Doctor Britton did not dictate to his associates and subordinates, but rather let each use his own judgment on the complex problem of what constitutes the limits of this or that major or minor group. Always an individual of strong convictions, never hesitating to express his own ideas, no matter whether others might be expected to agree with him or not, Doctor Britton continued his productive work regardless of some perhaps just, but some distinctly unjust criticism. He knew what he desired to accomplish and was eminently successful in devising ways and means of accomplishing his purpose. His great accomplishment in the establishment of the New York Botanical Garden in a great and essentially commercial city, was never more than a means to an end with him, for always first and foremost in his thoughts was botanical research, the means for making such research possible, and the publication of the results obtained.

As his own financial resources increased he liberally supported, by his own personal funds, those projects that appealed to him, particularly those associated with the New York Botanical Garden. On his death, indicating his abiding faith in the institutions he helped to organize and to develop through their years of struggle, he bequeathed one-half of his estate in varying amounts, to the New York Botanical Garden, the Torrey Botanical Club, the New York Academy of Sciences, the Staten Island Institute of Arts and Sciences, and Columbia University. Doctor Britton's wife, Elizabeth Gertrude Britton, herself a botanist of note, died four months before him, and from this shock of separation Doctor Britton never fully recovered. There were no children. He was survived by a sister, Harriet Louise Britton, and a brother, Richard H. Britton, both of Great Kills, Staten Island.

Sixty-nine species and varieties of living and fossil plants have been dedicated to Doctor Britton, and fifteen plants and
one animal have been named for Mrs. Britton. In addition two species of plants have been named in honor of the two con-
jointly. The generic names *Brittonamra, Brittonastrum, Britton-
ella, Brittonrosea, Bryobrittonia, and Neobrittonia* perpetuate his name among botanists. Further to perpetuate his name the periodical "Brittonia" was established as an official serial of the New York Botanical Garden in 1931, devoted to those fields of botanical research in which Doctor Britton was personally interested. In 1935 the great reference herbarium of the New York Botanical Garden was officially designated as the "Britton Herbarium."

The New York Botanical Garden is a constant reminder of the energy, wisdom, scientific attainments, and organization and administrative ability of Nathaniel Lord Britton. His name is indelibly associated with the annals of botany of North and South America and the West Indies. No monument is necessary to perpetuate his name for of him, in association with the great institution he established, it may truly be said: *Si monumentum requiris, circumspice.*
PUBLISHED BIOGRAPHICAL SKETCHES OF
NATHANIEL LORD BRITTON


BIBLIOGRAPHY

Contributed by John Hendley Barnhart

1877

1878

1879
NATHANIEL LORD BRITTON—MERRILL

1880
Notes [on mineralogy]. Sch. Mines Quart. 1: 198, 199. May, 1880.

1881
The true geological age of the metamorphic rocks of New York Island and Westchester County. Sch. Mines Quart. 2: 141, 142. March, 1881.
A preliminary catalogue of the flora of New Jersey. i-xiii, i-233. [July] 1881. (Geological Survey of New Jersey.)

161
1882

Additional notes on the geology of Staten Island. Trans. N. Y. Acad. 1 : 56, 57. 1882.


1883


Notes on a botanical excursion to Sam’s Point, Ulster Co., N. Y. Bull. Torrey Club 10 : 105, 106. September, 1883.


162
1884
Contributions toward a list of the state and local floras of the United States. (Continued.) (With William Ruggles Gerard.) Bull. Torrey Club 11: 43, 44. April, 1884.

1885
Contributions toward a list of the state and local floras of the United States. (Continued.) (With William Ruggles Gerard.) Bull. Torrey Club 12: 36. April, 1885.


Notes and criticisms on Mr. Grant Allen's theory of the origin of leaf-forms. Trans. N. Y. Acad. 3: 38-44. 1885.


1886


164

1887

[Specimens of fungi collected by members of the Association during the past two years.] Proc. Nat. Sci. Assoc. Staten Isl. 1: [53]. April, 1887.
Notes on the glacial and pre-glacial drifts of New Jersey and Staten Island. Trans. N. Y. Acad. 4: 26-33. 1887.

1888


Note on the growth of a vinegar plant in fermented grape juice. Trans. N. Y. Acad. 6: 66-70. 1888.

A list of plants collected by Miss Mary B. Croft, 1884-'85, at San Diego, Texas, near the headwaters of the Rio Dulce. (With Henry Hurd Rusby.) Trans. N. Y. Acad. 7: 7-14. 1888. Also as Contr. Herb. Columbia Coll. no. 4.


1889


A list of plants collected at Fort Verde and vicinity and in the Mogollon and San Francisco mountains, Arizona, 1884-1888, by Dr. E. A. Mearns, U. S. A. Trans. N. Y. Acad. 8: 61-76. 1889. Also in Contr. Herb. Columbia Coll. no. 9.

Remarks on recent discoveries in local Cretaceous and Quaternary geology. Trans. N. Y. Acad. 8: 177-181. 1889.


1890


An enumeration of the plants collected by Dr. H. H. Rusby in South America, 1885-1886.—XI. Bull. Torrey Club 17: 53-60. March 10, 1890. Also in Contr. Herb. Columbia Coll. no. 6.


167


Contributions to Texan botany. Trans. N. Y. Acad. 9: 181-185. 1890. (Additions to the list of plants collected by Miss Mary B. Croft at San Diego, Texas, 181-183; Note on some plants collected by Mr. Frank Tweedy in Tom Greene Co., Texas, in 1879. 183-185.)


New or noteworthy North American phanerogams.—III. Bull. Torrey Club 17: 310-316. December 9, 1890. Also as Contr. Herb. Columbia Coll. no. 16.


1891


NATHANIEL LORD BRITTON——MERRILL


Fungal diseases of the grape and other plants and their treatment. Bull. Torrey Club 18: 161, 162. May 1, 1891. (Review.)

Notes on North American trees.—XXV. Bull. Torrey Club 18: 162, 163. May 1, 1891. (Review.)


Contributions to American botany.—XVIII. Bull. Torrey Club 18: 310, 311. October 8, 1891. (Review.)


1892


170
NATHANIEL LORD BRITTON—MERRILL

[The publication of a name as a synonym.] Bull. Torrey Club 19: 81. March 5, 1892.


The American species of the genus Anemone and the genera which have been referred to it. Ann. N. Y. Acad. 6: 215-238. May, 1892. Also as Contr. Herb. Columbia Coll. no. 23.


Second edition of Webber’s appendix to the catalogue of the flora of Nebraska, with a supplementary list of recently reported species. Bull. Torrey Club 19: 280. September 10, 1892. (Review.)


Trees of the northern United States, their study, description, and determination, for the use of schools and private students. Bull. Torrey Club 19: 390, 391. December 15, 1892. (Review.)


NATHANIEL LORD BRITTON—MERRILL


The use of the generic name Halesia. Gard. & For. 6: 433, 434. October 18, 1893.


1894


February 20, 1894.
Torrey Club 21: 82, 83. February 20, 1894. (Review.)
Our conception of "species" as modified by the doctrine of evolution.
Herb. Columbia Coll. no. 51.
Professor Greene and Jacksonia and Polanisia. Erythea 2: 67, 68. April
1, 1894.
The herbarium of the late Isaac C. Martindale. Bull. Torrey Club 21:
176. April 25, 1894.
Manual of the botany of the region of San Francisco Bay. Bull. Torrey
Club 21: 179-181. April 25, 1894. (Review.)
25, 1894. (Review.)
Annual reports of the State Botanist of the state of New York. Bull.
Torrey Club 21: 181, 182. April 25, 1894. (Review.)
Neue Asiatische und Amerikanische Gentianien. Bull. Torrey Club 21:
182. April 25, 1894. (Review.)
Aizoaceae [of northeastern North America]. Mem. Torrey Club 5:
147. April 27, 1894.
Portulacaceae [of northeastern North America]. Mem. Torrey Club 5:
147. April 27, 1894.
Caryophyllaceae [of northeastern North America]. Mem. Torrey Club
Ranunculaceae [of northeastern North America]. Mem. Torrey Club 5:
155-162. May 5, 1894.
Berberidaceae [of northeastern North America]. Mem. Torrey Club 5:
162. May 5, 1894.
Menispermaceae [of northeastern North America]. Mem. Torrey Club
5: 162, 163. May 5, 1894.
Papaveraceae [of northeastern North America]. Mem. Torrey Club 5:
164-166. May 5, 1894.
Cruciferae [of northeastern North America]. Mem. Torrey Club 5:
Capparidaceae [of northeastern North America]. Mem. Torrey Club 5:
175. May 21, 1894.
Sarraceniaceae [of northeastern North America]. Mem. Torrey Club
5: 176. May 21, 1894.
Saxifragaceae [of northeastern North America]. Mem. Torrey Club 5:
177-180. May 21, 1894.
Hamamelidaceae [of northeastern North America]. Mem. Torrey Club
5: 180, 181. May 21, 1894.
Rosaceae [of northeastern North America]. Mem. Torrey Club 5: 181-


(Review.)


[Publication by signatures.] Erythea 3: 68. April 1, 1895.


Field, forest and garden botany. Science II. 1: 527. May 10, 1895. (Review.)


Staten Isl. 5: 11. December, 1895.

1896


1897


1898
An illustrated flora of the northern United States, Canada and the British possessions. Vol. III. Apocynaceae to Compositae. (With Addison Brown) i-xiv, 1-588, f. 2893-4081, and 81 f. numbered from 1a to 3875a. 1898.
An illustrated flora of the northern United States, Canada and the British possessions. General key and indexes to the three volumes. (With Addison Brown.) i-xiv, 17-83. 1898.

1899

1900

1901


Notes on Rudbeckia hirta L. Torreya 1: 1, 2. January 29, 1901.


A new hawkweed from Florida. Torreya 1: 41, 42. April 19, 1901.


1902


A new Peperomia from the island of St. Kitts. Torreya 2: 43. March 12, 1902.


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1903


1904


Scirpus coloradoensis sp. nov. Torreya 4: 93. June 8, 1904.


Also as Smithsonian. Inst. Publ. no. 1479.


1905


Galactia Curtissii sp. nov. Torreya 5: 33, 34. February 28, 1905.

Jacquinia Curtissii sp. nov. Torreya 5: 44. March 22, 1905.


1906


Contributions to the flora of the Bahama Islands.—III. Bull. N. Y. Bot. 
Gard. 4: 137-143. June 25, 1906. Issued separately in advance, 
March 19, 1906.
The classification of Cactaceae. Jour. Hort. Soc. N. Y. 1: 15. April, 
The hemlock grove on the banks of the Bronx River and what it signifies. 
N. Y. Bot. Gard. no. 83.
Recent botanical explorations in Porto Rico. Jour. N. Y. Bot. Gard. 7 : 
125-130, f. 4-12. May, 1906.
June, 1906.
First grant from the Students' Research Fund. Jour. N. Y. Bot. Gard. 
November, 1906.
Nature study work of the public schools. Jour. N. Y. Bot. Gard. 7: 274, 

1907
Two undescribed species of Conocladia from Jamaica. Torreya 7: 6, 7. 
February 7, 1907.
The sedges of Jamaica. [Abstract.] Torreya 7: 17, 18. February 7, 
1907.
A new polygalaceous tree of Porto Rico. Torreya 7: 38, 39. February 
28, 1907.
Report of the Secretary and Director-in-Chief for the year 1906. Bull. 
[Pioneers of science in America.] John Torrey. Pop. Sci. Mo. 70: 297, 
299, portr. April, 1907.
Report on the continuation of the botanical exploration of the Bahama 
Ribes chihuahuense sp. nov. Torreya 7: 102. May 20, 1907.
Address delivered at the dedication to Linnaeus of the Pelham Parkway 
bridge over the Bronx River. Jour. N. Y. Bot. Gard. 8: 136-138, 
f. 20. June, 1907.
Further remarks on the botanical exploration of the Bahamas. [Abstract.] 
tember 19, 1907. Also as Contr. N. Y. Bot. Gard. no. 97.
October, 1907.


1908


Druce’s List of British plants. (With Henry Hurd Rusby.) Torreya 8: 113-116. May 19, 1908.


185

1909


1912


1913


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1914


1915


History of the New York Botanical Garden. 1-16. [September 6, 1915.]

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1916


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1917


(Review.)


1918


An undescribed Scirpus from California. Torreya 18: 36, 37, f. 1. March 8, 1918.


Flora of the District of Columbia. Torreya 19: 244-246. (Review.)


1922


1923


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The Cactaceae. Descriptions and illustrations of plants of the Cactus family. (With Joseph Nelson Rose.) Volume IV. i-vii, 1-318, f. 1-263; pl. 1-37. December 24, 1923. Carnegie Institution of Washington, Publication no. 248, volume IV. "Pages 1-80, text only, were distributed under date of October 9, 1923."

1924


Lagetta Lagetto. Lace-bark tree. Addisonia 8: 61, pl. 287. February 5, 1924.


1925


1926


1927


1928


1929


1930


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1931

1932

1933

1934

1936