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South Carolina Botanists:
Biography and Bibliography

By *WILSON GEE*

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PREFACE

The following pages are with slight alteration the same biographies of South Carolina Botanists as appeared in the Sunday News of Charleston at intervals during the years 1909 and 1910. The data were gathered from various sources too numerous for individual acknowledgement. The resulting monograph was offered and accepted in 1910 as a thesis for the Master of Arts degree from the University of South Carolina.

The writer claims no exhaustive or critical appreciation of their work as the result of his efforts. There has been brought together here for the first time, however, a systematic arrangement of the biographies and bibliographies of the botanists of outstanding note in the state who in the past have contributed to its reputation in botanical lines.

He desires to thank Prof. A. C. Moore for the inspiration and help which he gave to the work and Prof. Yates Snowden, that ardent and delightful devotee of things South Carolinian, for many references and valuable suggestions. There are due, besides, acknowledgements to many relatives for information concerning their distinguished kinsmen. The appreciation for these favors is imperfectly expressed in the attempt to brighten somewhat the lustre which already surrounds the memory of the achievements of those whom they revere.

WILSON GEE.

June 14, 1918.

South Carolina Botanists: Biography and Bibliography

By Wilson Gee

JOHN LAWSON

Probably the earliest attempt to catalog the plants of the Carolinas is that of John Lawson in the year 1700. While chiefly a historian, for the merging of natural history in such large proportions into his description of the province, he deserves mention among the early botanists, who "attracted by the charms of our fair land, were content to dwell in its midst," at least long enough to become familiar with a part of its wonderful resources.

John Lawson, historian, was born in Scotland. He came to this country as surveyor general of North Carolina and began his surveys in 1700, but fell a victim to the jealousy of the Tuscarora Indians, who confused the surveyor of their territory with those that had despoiled them of it. He was captured while exploring North Carolina in 1712, in company with a Swiss named Graffenreid. The latter was allowed to purchase his freedom, but Lawson was put to death in a most cruel manner.

He was the author of one of the most valuable and thoroughly interesting of our early histories of the Caro-

linas: "*The History of Carolina containing the exact description and natural history of that country, together with the present state thereof and a journal of a thousand miles traveled through several nations of Indians, giving a particular account of the customs, manners, etc.*"

The original edition of this volume is now very rare; it was reprinted at Raleigh, North Carolina, however, in 1860. There is in the library of the University of South Carolina a copy of the edition of 1718, an old volume of about 258 pages, octavo size, bound in half leather.

The dedication is to the "True and Absolute Lords-Proprietors of the Province of Carolina in America," and he thus addresses himself to them:

"My Lords: As debts of Gratitude ought most punctually to be paid, so, where the Debtor is incapable of Payment, Acknowledgements ought at least to be paid.

* * * * *

"I here present Your Lordships with a Description of your Own Country; for the most part of her Natural Dress, and therefore, less vitiated with Fraud and Luxury. A Country whose Inhabitants may enjoy a Life of the greatest Ease and Satisfaction and pass away their Hours in Solid Contentment.

* * * * *

"Your Lordships most obliged

"Most humble

"and most devoted servant.

JOHN LAWSON."

The motive for his passage to America he explains as follows in the opening lines of the introduction to his history:

"In the year 1700 when people flocked from all parts of the Christian world to see the solemnity of the Grand Jubilee at Rome, my intention at that time being to travel, I accidentally met with a gentlemen, who had been abroad, and was very well acquainted with the ways of living in both Indies, of whom having made enquiry concerning them he assured me that Carolina was the best country I could go to; and that there then lay a ship in the Thames

ment he briefly describes, he left there after a night's stay and in fourteen days after arrived at Charles-Town, the metropolis of South Carolina."

In his "A Journal of a Thousand Miles Travel among the Indians from South to North Carolina," he runs further: "On December 28, 1700, I began my voyage (to North Carolina) from Charles-Town, being six English in company, with three Indian men and one woman, and an Indian to our Indian guide."

With the above information on the character of the trip, the date and nature of his trip, we may turn more intelligently to that part of his work with which we are directly concerned. In his description of the country he treats North and South Carolina separately, but in the portion called "The Natural History of Carolina" he considers Carolina as a whole. The following is quoted from the introduction to his history in support of his statement: "And since the produce of South and North Carolina is the same, unless silk, which this place produces great quantities of and very good, North Carolina having never made any trial thereof, I shall refer the natural produce of this country to that part which is called North Carolina, whose productions are much the

* * * * *

I shall now proceed to relate my journey thru the country from this settlement to the other, and then treat of the Natural History of Carolina, with other remarkable circumstances which I have met with during my eight years abode in that country."

Under a subdivision of the natural history entitled "Vegetables of Carolina," we find eighteen pages devoted to "an account of all the spontaneous fruits of Carolina."

we quote: "We will proceed, in the next place, to show what exotick fruits we have that thrive in Carolina, and what others it may reasonably be supposed would do there, were they brought thither and planted."

To enter into this list would be beyond the scope of the present work. A statement of his method is made by Lawson himself in the preface when he refers his readers to "the natural history, in which I have been very exact, and for method's sake ranged each species under its distinct and proper head." There are however, very few technical terms in the whole work.

The treatment of animals is even more elaborate than that of plants. This part of his work embraces forty-seven pages and is subdivided into "The Beasts of Carolina;" "The Insects of Carolina,"—in which we find no true insects, but chiefly reptiles; "The Birds of Carolina;" and "The Fish in the Salt and Fresh Waters of Carolina."

Apart from its historical significance, a work of this nature is worth little to the scientists of today, yet we feel a peculiar interest in it for its age and also as representing a part of the perspective in which the country was viewed in its early days. His untimely death, no doubt, deprived us of many interesting works; for he was a writer of no mean ability, and was certainly one to maintain the interest of his readers.

Bibliography

Lawson, John—A New Voyage to Carolina; containing the Exact Description and Natural History of the Country. London, 1709. Q.

History of Carolina.—Lord Taylor, 1714. Q.

History of Carolina.—Lord Warner, 1718.

History of Carolina.—Raleigh, N. C., Strother and Marcom, 1860.

Allerneuste Beschriebunz der Provints Carolina in West-Indien. Aus dem Englischen Herr Vischer, 1712.

MARK CATESBY

An early naturalist of reputation, who, while not a resident of Carolina, was one of the first to investigate the biological resources of our State, was Mark Catesby, an English scientist, and later a Fellow of the Royal Society. The birthplace of Catesby is not definitely known, nor the date of his birth, but it is generally recorded that he was born in London about 1679. If so, he must have removed from the place when quite young according to a statement made in the preface of his large and best known work, "The Natural History of Carolina, Florida and the Bahama Islands." For its autobiographical value a portion of this is interesting, and the following is quoted from it:

"The early inclination I had to search after plants and other productions in nature being much suppressed by my residing too far from London, the centre of all science, I was deprived of all opportunities and examples to excite me to a stronger pursuit after these things to which I was naturally bent. Yet my curiosity was such that, not being content with contemplating the products of our own country, I soon imbibed a passionate desire of viewing as well the animal and vegetable productions in their native countries, which were strangers to England. Virginia was the place, as I had relations there, which suited most with my convenience to go, where I arrived the 23rd of April, 1712. I thought then so little of prosecuting a design of the nature of this work that in the seven years I resided in that country, (I am ashamed to own it,) I chiefly gratified my inclination in observing and admiring the various productions of these countries, only sending from thence some dried specimens of plants, and some of the most specious of them in tubs of earth, at the request of some curious friends, amongst whom was Mr. Dale, of Braintree, in Essex, a skilful apothecary and botanist. To him,

besides specimens of plants, I sent some few observations on the country, which he communicated to the late William Sherard, LLD., one of the most celebrated botanists of this age, who favored me with his friendship on my return to England, in the year 1719, and by his advice (though conscious of my own inability) I first resolved on this undertaking, so agreeable to my inclination. But as expenses were necessary for carrying the design, I here most gratefully acknowledge the assistance and encouragement received from several noble persons and gentlemen, whose names are hereunder mentioned.

* * * * *

“With this intention I set out again from England in the year 1722 directly for Carolina, which country, though inhabited by English above an age past, and a country inferior to none in fertility, and abounding in variety of the blessings of nature, yet its productions being very little known, except what barely related to commerce, such as rice, pitch and tar, was thought the most proper place to search and describe the productions of. Accordingly I arrived in Carolina the 23rd of May, 1722, after a pleasant, though not a short, passage.

* * * * *

“Upon my arrival at Charles-Town I waited on Gen. Nicholson, then Governor of that Province, who received me with much kindness, and continued his favors during my stay in that country.

* * * * *

“As I arrived at the beginning of the summer I unexpectedly found this country possessed not only with all the animals and vegetables of Virginia, but abounding with even a greater variety. The inhabited parts of Carolina extend west from the sea about sixty miles, and almost the whole length of the coast, being a level, low country. In these parts I continued the first year searching after, collecting and describing the animals and plants. I then went to the upper uninhabited parts of the country, and continued at and about Fort Moore, a small fortress on the banks of the River Savanna, which runs from thence a

course of three hundred miles down to the sea, and is about the same distance from its source in the mountains."

It is to be noted from the above that early in the eighteenth century he raised the means for a voyage to the New World, where he arrived in 1712. The greater part of the period of this first trip was spent in Virginia. In 1719 he returned to England with a collection of plants, which was reported to have been the most complete ever before carried to England from the Colonies. This attracted the attention of men of science, especially Sir Hans Sloane and Dr. William Sherard, two of the greatest naturalists then alive. Catesby remained in England for some time arranging and naming his specimens, a considerable number of which passed into the museum of Sir Hans Sloane. Here he was led and assisted by his scientific friends to revisit America, and took up his residence in South Carolina in 1722. He traversed the coast and made distant excursions into the interior, collecting materials for his work.

Quoting further from the preface of this same work: "After my continuence almost three years in Carolina and the adjacent parts, (which the Spaniards call Florida, particularly that province lately honored with the name of Georgia,) I went to Providence, one of the Bahama Islands. * * * Both in Carolina and on these Islands, I made successive collections of dried plants and seeds, and at these islands more particularly, I collected many submarine productions, as shells, corallines, frutices marini, sponges, afroites, etc."

A better general description of his method of treatment of the plants cannot be given than that he himself gives. "I had principally a regard to forest trees and shrubs, showing their several mechanical and other uses, as in building, joynery, agriculture, food and medicine. I have likewise taken notice of those plants that will bear our English climate, which I have experienced from what I have growing at Mr. Bacon's, successor of the late Mr. Fairchild at Haxton. * * *

"As to the plants, I have given them the English and Indian names they are known by in these countries; and

for Latin names I was beholden to the above-mentioned learned and accurate botanist, Dr. Sherard."

In addition to his treatment of the plants, his work was quite extensively given to animals, and principally to the "feathered kind," of which he says: "I believe very few birds have escaped my knowledge, except some water fowl and some of those which frequent the sea."

In 1726 he returned to England and at once set seriously to work in preparing material for his magnificent and best known work, from which the above extracts have been taken. This was accompanied by a new map, constructed by himself, of the districts explored. The first volume appeared in 1731 and the second in 1748. There are upwards of one hundred plates in this first volume, all the figures of the plants having been drawn and etched by Catesby himself. In recognition of the merits of this first part of his work, on the 26th of April 1733, he was elected a Fellow of the Royal Society. A German translation, with an introduction by "M. Edwards, due College Royal des Medecins de Londres," was published at Nuremberg in 1756.

A third edition was required in 1771, to which a Linnaean index was appended. An original of this edition may be found in the library of the University of South Carolina. It consists of two large folio volumes, over fifty inches in length, and bound in calf. The plates are large and exquisitely done. Side by side, in parallel columns, we find the text in English and in French.

Catesby also produced (in 1737) "Hortus Britanno Americus, or a Collection of 85 Curious Trees and Shrubs, the Production of North America, adapted to the Climate and Soil of Great Britain." Many trees and shrubs were first introduced by him, and the publication of this volume added considerably to the introduction of American plants into England. He also produced some other works of importance, which are listed in the appended bibliography.

A West Indian genus of shrubs of the order *Cincho-*

naceae was named *Catesbaea* in his honor by the famous botanist Gronovius.

Catesby died at his house in Old street, London, on December 23, 1749.

BIBLIOGRAPHY

Catesby, Mark. "The Natural History of Carolina, Florida and the Bahama Islands." 2 Vols, folio, 1731.

Same. Revised by M. Edwards, with an appendix, 1748.

Same. German edition with introduction by M. Edwards, du College Royal de Londres," Nuremberg, 1756.

Same. Other German editions at Nuremberg in 1750, 1755, 1757 and 1770, and with Latin title in 1750 and 1777. "The translations generally omit part of the original."

Same. Third English edition. With Linnaean index of plants and animals appended, 1771. 2 Vols., folio, 220, colored plates.

"On the Migration of Birds." Proceedings of the Royal Society, 1747.

"Hortus Britanno-Americus, or a Collection of 85 Curious Trees and Shrubs, the Production of North America, Adapted to the Climate and Soil of Great Britain." Folio, seventeen engravings. (1737)

"Piscium, Serpentum, Insectorum, aliorumque nonnulorum Animalium, nec non Plantarum quarundam Imagines." Folio, Nuremberg, 1777.

ALEXANDER GARDEN

One of the most famous physicians of Colonial times, and according to Ramsay in his history of South Carolina, "a botanist of no low degree" was Dr. Alexander Garden. He was born in Scotland about the year 1728, and was the son of the Rev. Alexander Garden, of the Parish of Birse, in the shire of Aberdeen, a clergyman of high respectability who during the rebellion of 1745 was distinguished by his exertions in favor of the family of Hanover, and still more so by his humane interposition in behalf of the followers of the house of Stuart after their defeat at Culloden.

Dr. Garden received his philosophical and classical education in the University of Aberdeen at the Mareschal College there. His early medical training he received under the celebrated Dr. John Gregory, and studied also for a year in Edinburgh.

He arrived in South Carolina about the middle of the eighteenth century and began the practice of medicine in Prince William's Parish in connection with Dr. Rose. Here his interest for botanical studies began to assert itself more strongly. But having lost his health, he was obliged to take a voyage to the North for his recovery. In 1754 he went to New York, where a professorship in the college recently formed in that city was offered him.

With improved health he returned to Charleston and continued the practice of medicine there for about thirty years, acquiring a considerable fortune in this way. He seems also to have attained at the same time a high distinction in the literary circles of this city. Ramsay says: "He was well acquainted with the Latin and Greek classics and was a considerable proficient in the knowledge of belles-lettres, in mathematics, philosophy, history and miscellaneous literature, but his attention, when the duties of his profession permitted any relaxation, was chiefly directed to

the study of natural history and particularly that of botany."

His many like-minded friends in Europe and the mother country profited as the result of his investigations; for he made sundry communications to them on the observations which he from time to time made. Linnaeus, the greatest botanist of his age, was one of these friends, and he and Garden corresponded with each other in Latin. To do honor to his friend Garden, Linnaeus gave the name of *Gardenia* to a genus of most beautiful flowering shrubs.

To extend his knowledge in natural history, Dr. Garden accompanied Governor James Glen in 1752, when he penetrated into the Indian country and made the treaty with the Cherokees. In 1764 he gave to the public an account of the virtues of pink root (*Spigelia Marilandica*) and at the same time a botanical description of the plant. About the year 1772 he was elected a fellow of the Royal Society, and after his return to Europe in 1783 he was appointed one of its council and afterwards one of its vice presidents. His death occurred in the year 1791.

Bibliography

Alexander Garden—"The *Halesia*, first described by Dr. Garden, as appears by the letter of J. Ellis, Esq., F. R. S., read before the Royal Society, November 20, 1760." Transactions of the Royal Society.

"An Account of the Male and Female Cochineal Insects in a letter to John Ellis, Esq., read before the Royal Society, December 23, 1762." Transactions Royal Society.

"An Account of an Amphibious Bipes (the Mud Iguana or Syren of South Carolina,) communicated in a letter to John Ellis, Esq., read before the Royal Society." Transactions Royal Society.

"An Account of Two New Tortoises, in a letter to Thomas Pennant, Esq., and read before the Royal Society. May 2, 1771." Transactions Royal Society.

"An Account of the *Gymnatus Electricus*, in a letter to

John Ellis Esq., read before the Royal Society, February 24, 1778." Transactions Royal Society.

"An Account of the Pink Root (*Spigelia Marilandica*) with its Uses as a Vermifuge. 1764."

"Pleasure of Piety and Other Poems."

"Description of Table Rock."

"Anecdotes of the Revolutionary War in America,"
Charleston, 1822.

WILLIAM BARTRAM

William Bartram, botanist, was born in Kingessing, Pennsylvania, February 9, 1739, and died there July 22, 1823. He engaged in business in Philadelphia, and afterward in North Carolina. In 1765 he accompanied his father to Florida, and remained on the St John's River for several years cultivating indigo. In 1771 he returned to his father's home and devoted his attention to botany, a love for which he had inherited. He was very fortunate in having at his command the services of so eminent a botanist as his father, John Bartram, and he makes the following acknowledgment of the fact in the introduction to one of his most important works, "from the advantages the journalist enjoyed under his father, John Bartram, botanist to the King of Great Britain, and fellow of the Royal Society, it is hoped that his labors will present new as well as useful information to the botanist and the zoologist."

From 1773 till 1778 he traveled through the Carolinas, Georgia and Florida to examine their natural products and he made many drawings of the specimens he collected. An account of his experiences while on this trip was published under the title, "Travels Through North and South Carolina, Georgia and East and West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges or Creek Confederacy, and the Country of the Choctaws. Containing an Account of the Soil and Natural Productions, of those Regions, together with Observations on the Manners of the Indians." A copy of the second edition of this work, published in London, 1794, is to be found in the library of the University of South Carolina. The first edition was published in Philadelphia in 1791. The opening lines of the first chapter give us in his own words the motives which prompted him to take this trip: "At the request of Fothergill, of London, to search the Floridas

and the western parts of Carolina and Georgia, for the discovery of rare and useful productions of nature, chiefly in the vegetable kingdom; in April, 1773, I embarked for Charleston, S. C."

His treatment of the plants is not systematic; but he mentions numbers of them in his description of the country, giving them their correct scientific names. Nor does his description apply to all parts of the State; for he seems to have visited only the northwestern part.

In 1782 he was appointed professor of botany in the University of Pennsylvania, which position he declined on account of impaired vision. In 1786 he became a member of the American Philosophical Society, and in addition to his botanical labors prepared and published the most complete list of American birds previous to that of Alexander Wilson, whom he greatly assisted at the outset of his career. He possessed considerable talent for drawing and made the illustrations in "Barton's Elements of Botany," thus making known for the first time by illustration many of the most curious and beautiful plants of North America. Besides this, he published several works, for a list of which see the appended bibliography.

Bibliography

Bartram, William—"Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges or Creek Confederacy, and the Country of the Choctaws. Containing an account of the soil and natural productions of those regions, together with observations on the manners of the Indians." Philadelphia: James and Johnson, 1791. 520 pp.

English editions, London, 1792, 1794; Dublin, 1793.

A German edition, William Bartram's Reisen durch Nord-und-Sud-Karolina * * Aus dem Englischen. Mit erlauernden anmerkungen von E. A. W. Zimmermann, Hofrath und Professor in Braunschweig, Berlin, 1793.

“A French edition: Voyage dans les parties dus de l’Amerique septrionale; savoir; les Carolines Septrionale et Meridionale * * trad. de l’angl. Par. P. V. Benorst, Paris. An. VII (1799) 2 vols. 120. pp 457.

Dutch edition, Haarlem. 1794-1797, in three parts.

“Some accounts of the late John Bartram:” Medical and Physical Journ. Philadelphia, 1804.

THOMAS WALTER

Thomas Walter, botanist, was born in Hampshire, England, about 1740, and died near Charleston, S. C., about 1788. He received a liberal education in England, but emigrating to this country, settled on a plantation in St. Stephen's Parish, S. C. There he followed the business of a planter and devoted his leisure to botany. In his garden he cultivated the plants that he subsequently described, and several species have since been named in honor of him.

Relatively little in a connected way seems to be known of Walter, but here and there we find an occasional reference. Ezra Brainerd, in an article in Volume 3, Bulletin of Charleston Museum, speaks of him as "an enthusiastic student of nature, who was the first to publish in his *Flora Caroliniana* a fairly complete account of the flowering plants of a definite region in North America."

There can be no doubt that Walter was during the time in which he lived of equal rank if not superior to any of the botanists resident in the colonies. He easily ranks foremost among all the botanists of our State previous to his own day. His principal publication is "*Flora Caroliniana Secundum Systema Vegetabilium perillustris Linnaei digesta*." This was published in London in 1788.

Copies of this work are now very rare; but one may be found in each of the libraries of the University of South Carolina and the Charleston Museum.

The following extract taken from the proceedings of the Elliot Society, Volume 1, page 53, describes a visit of Henry W. Ravenel over fifty years ago to the place of Walter's former residence. It is of interest in that it gives us the impressions of this prominent botanist of a more recent time.

"On a late visit which I made to 'Walter's former residence on the banks of the Santee, in St. John's Parish, I found two clusters of this tree, (tallow tree of China,

Stillingia sebifera,) bearing the marks of age. They, with one or two other things, were the only memorials left of his botanical garden. The present trees, one of which has attained a height of about thirty feet, are off-shoots from a half decayed stump of at least one foot in diameter. That he was familiar with this plant is evident from an allusion which he makes to it in the preface to his *Flora Caroliniana*. For seventy years they have survived the want of culture, and resisted the inroads of surrounding native vegetation and may, therefore, lay claim to full and complete acclimation.

"In the midst of this grove there stands a solitary grave stone marking the last resting place of this early pioneer of American science. It is a plain marble slab, and bears this simple record of filial love:

IN MEMORY
OF

THOMAS WALTER.

A native of Hampshire in England
and many years a resident of this
State. He died in the beginning of
the year 1788. Aetatis cir 48 ann.

To a mind liberally endowed by
nature and refined by a liberal
education he added a taste to
the study of Natural History
and in the department of
Botany science is much
indebted to his labours.

At his desire he was buried on
this spot once the garden in
which were cultivated most
of the plants of his
Flora Caroliniana.

From motives of filial affection
his only surviving Children
ANN and MARY
have placed this memorial."

In Samuel Dubose's "The Huguenots of South Carolina," under a section entitled the "Reminiscences of St. Stephen's Parish, Craven County and Notices of Her Old Homesteads," we find the following: "About twenty years before the Revolutionary war the belt of land bordering on the Santee River, through the whole extent of the parish of St. Stephen's was the garden spot of South Carolina."

* * * * *

The plantation known as "Mexico," at the western extremity of the parish, was the residence of the late Major Samuel Porcher.

* * * * *

Northwest of Mexico and directly on the river bank was the residence of Thomas Walter, Esq., the botanist, an Englishman by birth. He embellished his seat with a botanical garden, which long commanded the admiration of his neighbors. His first wife was Sarah Peyre, by whom he had two daughters; his second wife was Dolly Cooper, whose daughter, Emily, their only child, married Judge Charlton, of Savannah."

Quoting further from the same work, under a portion entitled "Historical and Social Sketch of Craven County, South Carolina," by Frederick A. Porcher, Esq., and published in the Southern Quarterly Review for April, 1852: "One citizen of this parish has earned for himself a reputation in the world of letters, and it is strange that Ramsay, who appears to have sought eagerly after Carolinian celebrities, should have entirely ignored his existence. Thomas Walter, an English gentleman, whose devotion to the cause of science led him to the wilds of Carolina, was attracted by the charms of Miss Peyre, of St. Stephen's, married her and settled there. He devoted himself particularly to the pursuit of botany and the curious are still occasionally rewarded by a visit to his garden, the ruins of which may still be seen near the banks of the Santee Canal. He is the ancestor of one branch of the Porcher family, and of the Charlton family of Georgia."

BIBLIOGRAPHY.

Walter, Thomas—"Flora Caroliniana, Secundum Systema Vegetabilium, perillustris Linnaei digesta." London. J. Fraser, 1788.

JOHN DRAYTON.

John Drayton is little known as a botanist; he figures chiefly for his political activities. Yet he deserves mention among the botanists of South Carolina for the work which he did towards cherishing and propagating a then comparatively new science.

John Drayton, known in history as Governor Drayton, and at one time a Judge of the United States District Court for South Carolina, was born in 1766, probably at Charleston, S. C. He was the son of Chief Justice William Henry Drayton, who died during a visit to Philadelphia, September 3, 1778. John Drayton was placed by his father under the instruction of the celebrated Dr. Witherspoon, at Princeton, N. J. He completed his legal education in London, was admitted to the bar and opened a law office in Charleston, S. C. In early life he was married to Miss Hester Rose, daughter of Philip Tideman. In 1798 he was elected Lieutenant Governor of South Carolina, and on the death of Governor Edward Rutledge in January, 1800, Mr. Drayton succeeded to the Governorship. At the end of his term in the following December, he was elected Governor for a term of two years. His administration was a successful one, and he was said to be the first Governor of South Carolina who undertook to make a thorough personal review of the military strength of the State. While he held the executive office in 1802, Governor Drayton published a book entitled "A View of South Carolina," a valuable work containing a large amount of useful statistical information. Of this some thirty-odd pages are devoted to the plants and animals of the State, principally to the plants. The following is quoted from that work:

"Although some attempts have been made to ascertain the vegetable productions of South Carolina; yet

JOHN DRAYTON

much remains still unexplored. To Catesby we are indebted for some drawings, and but imperfect descriptions of plants and flowers, Bartram in his travels through the State in 1776 has added some particulars to botanical information. Walter in his "*Flora Caroliniana*" has brought forward a still greater catalogue; not, however, without being suspected of stating different species where varieties only existed. And Michaux, in a work which he has lately published at Paris, has added valuable information respecting the history of American oaks. From these sources, and some others which present themselves, the following indigenous plants may be noted as flourishing within the boundaries of this State."

He devotes twenty-four pages of the "*A View of South Carolina*" to a "*Botanical Catalogue of the most remarkable plants, shrubs and trees, indigenous to the State of South Carolina.*" The succeeding three pages are given to the "*Exotic plants.*" Proportionately little space applies to the fauna; this is comprised in a list of animals only four pages in length.

But the work which makes Drayton worthy of mention among the botanists of our State is "*The Carolinian Florist,*" an unpublished work dated 1807, the manuscript of which is to be found in the library of the University of South Carolina. This is in the form of a book bound in Russia leather and containing 307 pages. It follows very closely in English the "*Flora Caroliniana*" of Thomas Walter, which was written in Latin. A clearer insight into the nature of the work can be obtained from a reprint of the exact title and the letter which it contains, addressed to the trustees of South Carolina College.

"*'The Carolinian Florist,'* in which upwards of one thousand plants are mentioned, and the places of growth and times of flowering of many of them are ascertained.

"By John Drayton, author of '*Letters Written During a Tour Through the Northern and Eastern States of*

America:" Of "A View of South Carolina as Respects Her Natural and Civil Concerns," and Member of the Royal Society of Sciences of Gottingen in Hanover.

"To the Honorable, the Trustees of the South Carolina College—Gentlemen: I beg leave to present the Collegiate Institution over which you preside this manuscript work.

"As the botanical publications heretofore respecting this State are in Latin, for my better information, I have thus rendered them into English, and hope a work of this kind may not be unacceptable, although there be little of originality in its composition. There are no doubt many errors in the following pages which have escaped my correction, partly because I have not noticed them, and partly owing to the imperfect knowledge which I have of the science of botany. But still I trust much correct information will be found in their perusal, and much inducement for further and better inquiries.

"It is a matter of regret that a science so useful in its nature, so pleasing in the investigations and so connected with the purest principles of morality and religion, should have thus little attracted the attention of our citizens. Perhaps this may be owing to its being little noticed as yet at our public seminaries; and to an idea which has prevailed of its being an arduous pursuit; more so from the want of professors and teachers in a study which requires many explanations and particular examinations than from real difficulties springing from the science itself. However, with the civilization of our country, which education has afforded, the veil at length is so far withdrawn as to afford us the reasonable hope that shortly the general information will be better on this subject. For already botany is studied in some of our colleges, and Barton has spread forth its beauties in language both pleasing and attractive. Come then let us sometimes unbend the mind from more serious pursuits and enjoy this calm, this delightful recreation. On the harmonies of nature its system is erected, its pursuits are mild, its

discoveries pleasing, all of them tending to compose and soften the troubles of humanity, to make friendships, to chase away enmities. To lead by calm reflection to that happy temper of mind which makes adversity not fearful, and which, when fortune favors, adds much to the pleasures we enjoy.

"From Walter principally the following pages are compiled; from Barton also, and Michaux, much original matter is introduced. In some places I have inserted the names of plants on the authority of Michaux instead of Walter, as believing the information of the former and his connection with learned botanists to be greater than the latter. But in general have followed Walter.

"In addition to what they have published I have noted the times of efflorescence of many plants, and in what parts of the State they are to be found; and the better to assist such researches a map of this State has been affixed; dividing its territory into lower, middle and upper country, as nature in her productions seems peculiarly to require this division. In many cases also I have referred to books, where correct engravings of the plants may be seen, which gives the reader an opportunity of referring to representations of plants otherwise not being within his control. Agreeably to Dr. Barton's method, a character is given to each class, and mention made of plants as medicinal or ornamental. The uses of wood and plants are also noticed, as relating to husbandry, mechanics, agriculture, ship-building or house building. These and other useful informations, I trust, will be found in the following pages. They have been presented to your respectable board, cherished by no vain hopes, but as springing from a desire of promoting the public good. Which, if this humble attempt shall be deemed by you, in the smallest degree, to have been done, the object of my efforts has been happily attained.

"The Author.

"Charleston, October 29, 1807."

During his first term as Governor, Drayton recommended the establishment of a college at Columbia, and on December 18, 1801, an Act was passed by the Legislature establishing "The South Carolina College." On account of his services in its establishment, the institution conferred upon him the degree of LL.D.

When his term as Governor expired, he was chosen by the citizens of Charleston one of their Senators in the Legislature, which office he held until December 10, 1808, when he was again made Governor for the ensuing two years. When his second term closed he declined a re-election to the Legislature. On May 7, 1821, he was appointed and commissioned by President Madison, Judge of the District of South Carolina, and continued in the performance of this office with firmness, patriotism and industry until his death at Charleston, S. C., November 27, 1822.

Bibliography.

—Drayton, John.—"Letters Written During a Tour Through the Northern and Eastern States." 1784.

—"A View of South Carolina." (500 copies.) 1802.

—"The Carolinian Florist." (MSS in U. of S. C. Library.) 1807.

—"Memoirs of the American Revolution." 2 vols. 1821.

JOHN L. E. W. SHECUT.

Prominent among the early botanical workers of our State we find the name of John L. E. W. Shecut. Dr. Shecut was the son of Abraham and Marie Barbary Shecut, French Huguenots, driven to Switzerland during the early years of the persecution, and from thence taking passage to America, settling in Beaufort, S. C. Dr. Shecut was born in Beaufort, S. C., December 4, 1770, and died in Charleston, S. C., June, 1836. His parents removed to Charleston at some time prior to 1779.

His early medical training was received under a friend of the family, Dr. David Ramsay, famous as a historian and physician, and later he went to Philadelphia where he received the degree of M. D. in 1791, at 21 years of age. He returned to Charleston and immediately began the practice of medicine, which he continued till his death.

Dr. Shecut was twice married, first to Miss Sarah Cannon, of Edisto Island, on January 26, 1792; the second time, February 7, 1805, to Miss Susanna Ballard, of Georgetown, S. C. As a result of these unions nine children were born; four by the first marriage and five by the second.

In 1813 Dr. Shecut founded "The Antiquarian Society of South Carolina," which afterward became "The Literary and Philosophical Society of South Carolina."

He was the founder, and for a length of time president of the American Homespun Company," established in 1820, which operated, it is believed, the first cotton mill in the State. This was built in the vicinity of Charleston, S. C.

In his medical practice he was one of the earliest physicians in this country to use electricity in the treatment of disease, and in 1806 he exhibited to the public

his electrical machine, which he invented and used in his profession.

As an author, considerable work stands to his credit. Among his principal works was his "*Flora Carolinensis*," published in 1806, in two volumes. This was the most extensive work on the botany of the State published up to that time. Shecut seems to have been a very versatile man from the number of interests that engaged his attention. Botany was a subject to which he devoted a great deal of time. As evidencing his interest in this subject the passages following are quoted from his "*Medical and Philosophical Essays*."

After describing the establishment of the Medical Society in 1789, he says: "The zeal for the promotion of science was soon evidenced by the formation of three auxiliary institutions: The Humane Society, the Charleston Dispensary for the Poor, and the Botanic Garden.

* * * * *

"The Botanic Society, which also emanated from the Medical Society, was founded in 1805 and was incorporated in the same year."

And quoting from Ramsay's History of South Carolina, he further adds: "The Medical Society gave to it three hundred dollars, fifty dollars per annum, and a large lot of land, which had been generously given to them by Mrs. Savage, now Mrs. Turpin, to be used as a Botanic Garden. The inhabitants were invited to join the Association, and on their annual payment of any sum between four to ten dollars at their option, they were entitled to privileges in proportion to their respective subscriptions, and became members of the Botanic Society."

"Notwithstanding all the advantages and delights that this most pleasing and instructive science offered to all the citizens * * * Notwithstanding an annual sum of \$1,176 thus obtained from voluntary subscribers * * * and although the garden was opened the same year under the most favorable auspices and en-

riched with a considerable number of valuable indigenous and exotic plants, it flourished for a few years beyond the most sanguine expectations of its friends, it has fallen.

"A second attempt was made * * * but it was in vain.

* * * * *

"In the year 1806, conceiving the era favorable to botany, the author compiled and published by subscription a series of numbers on botany entitled 'Flora Carolinensis' in honor of his native State. In this work he claimed no other merit than the design of promoting a taste for the study of that science, by simplifying as much as possible the Linnaean system. This work was honored with a numerous patronage and was continued to the completion of a volume of seven numbers; at which he was compelled to relinquish the undertaking, with the loss of twenty months close devotion to its progress and also of \$1,800 and upwards.

"It is believed that no Carolinian has studied the science of botany otherwise than for horticultural purposes prior to the Revolution: but since that event this delightful science has excited attention, which, though daily increasing, is far short of what it deserves.

"At this period, botany is more extensively cultivated as a science; it has been found all-important to the student of medicine and by no means beneath the dignity of students in all the branches of science. Indeed the fair sex, conspicuous for their attention to the fine arts and accomplishments, have lately been aroused to uncommon exertions towards its acquirement. In the winter and spring of 1817-18, during the lectures of Mr. Whitlow, in this city, it is said that upwards of fifty young ladies attended in classes, for the purpose of acquiring a regular knowledge of this delightful science, many of whom were making the most delightful progress therein."

Bibliography.

Shecut, J. L. E. W. "Flora Caroliniensis," 1806.
(Dedicated to Peter Frenau, Esq.)

—"Essays on the Prevailing Fever," 1817. (Dedicated to Dr. David Ramsay.)

—"Medical and Philosophical Essays." 1819. Dedicated to the Hon. John Drayton, LL. D.)

—"The Elements of Natural Philosophy and a New Theory of the Earth." (Dedicated to Samuel L. Mitchell, M. D., F. R. S., Professor of Natural History and Botany in the University of the City of New York.)

—"Medical Philosophical, Topographical and Historical Sketches of the City of Charleston."

—"Contagion and Infection." (Dedicated to Dr. J. B. Witridge.)

—"Principles and Properties of the Electric Fluid." 1817. (Dedicated to Dr. B. B. Greenland.)

—"Medical History of South Carolina."

—"Strictures on Adam Clark's Commentary."

—"The Eagle of the Mohawk." (A novel.)

—"The Scout or the Fast of St. Nicholas. A Novel of the XVII Century."

JAMES MACBRIDE.

James Macbride, physician and botanist, was born in Williamsburg County, S. C., in 1784; died in Charleston, S. C., in 1817. He was graduated at Yale in 1805, and then studied medicine. Settling in Pineville, S. C., he practiced his profession for many years, but later removed to Charleston where he died of the yellow fever. Dr. Macbride was an ardent devotee of botany and contributed papers on that science to the "Transactions of the Linnaean Society" and elsewhere. His name was given by Dr. Stephen Elliott to the *Macbridea pulchra*, a genus found in St. John's, Berkeley, S. C., of which but two species are known to exist. This same authority dedicated the second volume of his "Sketch of the Botany of South Carolina and Georgia (Charleston, 1824) to Dr. Macbride.

In his "Medical and Philosophical Essays" Shecut has the following to say with regard to him: "Dr. Macbride, late of St. Stephen's, while living, pursued with unceasing ardor the study of botany, particularly that branch of it more immediately connected with medicine.

"Society will long deplore the loss of this amiable physician and scientific botanist, who, in the midst of his useful career, and in which he was deservedly acquiring for himself an accession of self-earned honors and applause, fell a victim to his professional zeal, during the prevalence of the fever of 1817."

Stephen Elliott in the preface to Volume II, "Sketch of the Botany of South Carolina and Georgia," speaks of him as follows:

"But principally to the late Dr. James Macbride a tribute is due not only for the services which he himself actually rendered, but for the contributions which

he induced others to offer. Devotedly attached to science, he had the talent to make it popular wherever his influence extended. Profoundly skilled in his profession and high in the confidence of his fellow citizens he fell a victim to the fatigues and exposures of an extensive practice. In the midst of a brilliant career, with prospects of increasing usefulness and extended reputation he died at the early age of 33. He left to many friends a mournful inheritance—the task of lamenting one so highly gifted, so prematurely lost. To his memory this volume is inscribed as a testimonial of long continued friendship and of unabated respect. It is among the incidents which embitter life that those who have shared in common labors should so often be separated before the termination of their pursuits. The individuals who took most interest in this sketch scarcely lived to see the commencement of its publication. It is to the dead that the author has to consecrate the results of his labours.”

STEPHEN ELLIOTT.

Stephen Elliott, botanist, was born in Beaufort, S. C., November 11, 1771; died in Charleston, S. C., March 28, 1830. He was the son of William Elliott, who settled in Beaufort, purchased land and married in 1760 Mary Barnwell, a grand-daughter of John Barnwell. The father died while Stephen was a child, but his elder brother, William, took good care of his education. After the preliminary studies, he entered Yale College in the sixteenth year of his age and graduated in 1791. At this time he delivered an English oration on "The Supposed Degeneracy of Animated Nature," and took one of the highest honors in his class. Among his college companions were Chancellor Jones, Samuel Miles Hopkins, of New York, and Judge Gould, of Litchfield, Conn.

In 1796 Stephen Elliott married Miss Esther Habersham of Georgia, and was elected a delegate to the State Legislature, in which he continued to serve until the establishment of the "Bank of the State" in 1812, of which he was elected president. He then removed with his family to Charleston. All his leisure hours had for many years been devoted to natural science and to botany in particular. Mr. Elliott was here considered the leader in all associations for their advancement. He was instrumental in the formation of the Literary and Philosophical Society in 1813, and aided it by inviting to his own house, at stated periods, such gentlemen as were most interested in the scheme. In 1814 he delivered the first anniversary address to that institution, remarkable alike for its elegance of diction and the capacity of mind which it revealed—that of embracing such various pursuits of science. His object was not only to explain their relation to each other as branches of literature, but to encourage the members

to add zeal to knowledge and perseverance to enterprise. He took the lead in what he recommended, and delivered a course of lectures on botany gratuitously to a large class of ladies and gentlemen. He likewise, in conjunction with Hugh S. Legare, became editor of the "Southern Review," and himself contributed many articles.

Mr. Elliott was one of the earliest and warmest advocates for the establishment of the Medical College in 1825, and was elected one of the faculty, as professor of natural history and botany. His most elaborate and valuable work, his "Sketch of the Botany of South Carolina and Georgia," was written and published in the midst of these laborious engagements, financial and scientific; the first volume appearing in the year 1821, and the second in 1824. This accumulation of business mental and bodily, was too great for him to sustain; he died suddenly in 1830, struck down by apoplexy.

Contemporary with him we find Shecut and Macbride, the latter of whom specially assisted Elliott in his botanical work. In his "Medical and Philosophical Essays" Shecut has the following to say with regard to Elliott's botanical work:

"In the year 1817 Mr. Elliott commenced the publication of his "Sketches of the Botany of South Carolina and Georgia," of which five numbers of the first volume, accompanied with several highly finished plates of grasses, is completed. Of the merits of this work it is unnecessary to say anything in this place. The well known talents of the author, his travels and close attention to botany, particularly that of his native and her sister States, are its guarantees.

"As a direct and truly scientific classification, and arrangement of plants indigenous to South Carolina and Georgia, containing several new and hitherto unknown or nondescript species, together with a mass of valuable information with regard to the agricultural advantages and medicinal properties of many species, this work may be justly considered the best on the

botany of these States that has been yet offered to the public."

Bibliography.

Elliott, Stephen—"Napoleon Bonaparte." (Article in Southern Review, No. 1.)

"On the Constitution of the United States. (Southern Review, No. 2.)

"Irving's Columbus." (Southern Review, No. 3.)

"Travels in Russia." (Southern Review, No. 3.)

"Napoleon Bonaparte." (Southern Review, No. 3.)

"Views of Nature and Internal Improvements." (Southern Review, No. 4.)

"Walsh's Narrative." (Southern Review, No. 6.)

"Education in Germany." (Southern Review, No. 7.)

"Classification of Plants." (Southern Review, No. 8.)

"Bourrienne's Memoires." (Southern Review, No. 10.)

"Catalogue of Books in the Charleston Library."

"A Sketch of the Botany of South Carolina and Georgia." Two vols., 1821-1824.

HENRY W. RAVENEL.

Henry W. Ravenel, botanist, was born in St. John's Parish, Berkeley, S. C., May 19, 1814; died in Aiken, S. C., July 17, 1887. He was graduated at the South Carolina College in 1832, and settled in St. John's, where he became a planter. In 1853 he removed to Aiken, S. C., and there he spent the remainder of his life.

As a young man he evinced a fondness for natural history and pursued studies in botany with enthusiasm throughout his long life. He studied critically the phaenogams of South Carolina, extending also his work largely into the field of cryptogamic botany. Mr. Ravenel discovered a large number of new species of cryptogams and besides not a few new phaenogams. With the probable exception of the Rev. Moses A. Curtis, he was the only American of his time who knew specifically the fungi of the United States, and it is doubtful whether any other botanist has covered so wide a range of plants.

In 1869 he was appointed a botanist of the Government commission that was sent to Texas to investigate the cattle disease prevalent there, and at the time of his death he was botanist to the department of agriculture of South Carolina. The degree of LL. D. was conferred upon him by the college in Winston-Salem, N. C., several years before his death.

Unfortunately Dr. Ravenel's deafness prevented his acceptance of two offers of a professorship in botany—one in a college in Baltimore, which offered to establish a chair of botany if he would fill it; the other in a college in California. He was a member of various societies in the United States and Europe. In 1849 he was elected a correspondent of the Academy of Natural Sciences. A few years later he was elected a member of a scientific association in Vienna.

HENRY W. RAVENEL
A. B. 1832, South Carolina College

The following is a reprint of the membership card :

Die
Kaiserlich Konigliche
Zoologisch botanische Gesellschaft
in
Wien
ernannt
Herrn
H. W. Ravenel, Esq.,
als
Mitglied
Wien am 5 Jahrer 1883.

Collorid Miensfuht,
Präsident.
Brunner von Wattenwyl,
Vice Präsident.
Claus J. Rogenhofafs,
Secretar.

He was agricultural editor of "The Weekly News and Courier," and in addition to his botanical papers, he published "Fungi Caroliniani Exsiccati," (5 volumes: Charleston, 1853-60,) and with Mordecai C. Cooke of London as joint author, "Fungi Americani Exsiccati," (8 volumes, 1878-82.) The most valuable part of his excellent Herbarium, (the cryptogamic part) was sold to the British museum in 1893. The remainder, the phaenogamic, was sold to Converse College some years later.

The following is quoted from the "Ravenel Records," p. 62 et seq.:

"Henry W. Ravenel, LL. D., who was born at Pooshee, St. John's, Berkeley, May 19, 1814, removed to Aiken in 1853, and died July 17, 1887, was a botanist of more than national reputation.

"In the Transactions of the Huguenot Society of South Carolina,' No. 1, it is said that he rose to the first rank of American scientists. He was correspondent of

world renowned societies, and of men of learning, and was a member of the Zoological and Botanical Society of Vienna.

"The best known of his works is "The Fungi Caroliniani Exsiccati," in five volumes; which appeared 1853-60. This was the first published series of named specimens of American fungi, of which only thirty were issued. At a later period he, in connection with Prof. M. C. Cooke, of England, published in England a second series, 'Fungi Americani Exsiccati.' These copies were sold at five guineas each."

"In 1869 he, with Prof. Gangee, was appointed by the United States Government to investigate the cattle disease known as "milk sick," then prevailing in Texas. The common opinion, and one may hear it all over the mountains of Western Carolina to this day, is that cows are affected with this disease, so dangerous to mankind, by eating a poisonous plant. The exhaustive report of these botanists is said to disprove this theory.

"In a long article in the Botanical Gazette, published at Crawfordsville, Indiana, August, 1887, it is said: "The name of Ravenel will be perpetuated in the genus *Ravenelia* of the *Uredineae*, a genus so peculiar in its character that it is not probable that it will ever be reduced to a synonym. One genus and fifty new species of plants have been named after him. His researches were original, and it is fairly claimed that his knowledge of the cryptogamic flora of the Southern States exceeded that of any other person; and for a long time he and his friend, Dr. M. A. Curtis, were the only Americans who knew specifically the fungi of the United States.

It is said that he was better known and appreciated in Europe than in this country."

* * * * *

Bibliography.

Ravenel, H. W. Catalogue of the Natural Orders of Plants in the Vicinity of the Santee Canal, as Represented by Genera and Species. Proc. Am. Ass. Adv. Science. Vol. 3, 1850.

—Notice of Some New and Rare Plants Found in this State. Proc. Elliott Soc. 1856.

—Description of a New Species of *Baptisia* (with plate.) Proc. Elliott Soc. 1856.

—Some Rare Southern Plants. Bull. Torrey Bot. Club. N. Y. 1876.

—Contribution to the Cryptogamic Botany of South Carolina. Southern Med. Journ.

—List of Books. Pamphlets. Catalogues and Contributions to Scientific Magazines relating to the Botany of this State. South Carolina Resources, etc., p 368, 1888.

—Fungi Caroliniani Exsiccati. Charleston. 5 vols. 1853-1860.

—Fungi Americani. London 8 vols. 1878-1882.

LEWIS R. GIBBES.

Lewis R. Gibbes, eldest son of Lewis Ladson Gibbes, and Maria Henrietta Drayton, was born in Charleston, S. C., August 14, 1810; died on November 21, 1894, at the same place. A part of his early educational training he received at the Grammar School of the University of Pennsylvania, in Philadelphia, in the years 1821 and 1822, then under the direction of the Rev. James Whitbank; but his preparation for college was made in the Pendleton Academy, Pendleton, S. C., in the years 1823 to 1827. December 27, 1827, he was granted admission to the junior class of the South Carolina College and graduated in December, 1829, with the highest honors.

Upon graduation he began the study of medicine in the office of Dr. Arthur S. Gibbes, of Pendleton. He had been interested since boyhood in the subject of botany, his mother being somewhat of a botanist herself; and while here he entered upon the study of botany in the fields and forests surrounding his father's residence. At the request of the trustees, he took charge of Pendleton Academy, giving instruction in the classics and mathematics until a permanent principal could be selected. In November he went to Charleston to enter the office of Dr. John Wagner, and at the same time took his first course of lectures in the Medical College of the State of South Carolina. He was elected December 3, 1831, tutor in mathematics at the South Carolina College, in place of Isaac W. Hayne, resigned. While tutor he continued the study of botany in the woods and sandhills around Columbia, and that of medicine in the office of Dr. Thomas Wells. The results of this work were published in October, 1835, in a small pamphlet, entitled "A Catalogue of the Phaenogamous Plants of Colum-

bia, S. C. and Its Vicinity," which contains the names of about 900 species, with notes on some of them.

About this time a reorganization of the College took place, and Mr. Gibbes found his tutorship abolished and himself constituted acting professor of mathematics. He continued to act in this capacity until the close of the college term in June, 1835.

Returning to Charleston, he took his second course in the Medical College of the State, and was admitted to the degree of M. D. in March, 1836, receiving the prize cup for the French essay. He then sailed for France, and pursued in 1836-37 his studies at Paris, under the ablest professors at the Sorbonne. While here he was a constant visitor to the Jardin des Plantes, and from the professors there employed he obtained botanical and conchological specimens in exchange for those carried over by him from this country. At the time of his death his Herbarium contained more than 4,000 specimens.

In November, 1837, he returned to Charleston, and was elected professor of mathematics in the College of Charleston in February, 1838, a position which he filled for more than fifty-four years. Though originally a teacher of mathematics, his subsequent instruction embraced astronomy, mechanics, physics and chemistry. In 1853 he declined the professorship of mathematics in the South Carolina College. From 1848 to 1853 he did much work in the United States Coast survey. Beginning with 1837, he wrote articles on subjects connected with astronomy, natural history, etc., for various publications. An article "On the Occultator," published in the American Journal of Science, March, 1869, was reprinted in journals in England and France.

In Vol. I, Proceedings of the Elliott Society we find the following statement. "Prof. Gibbes, after most faithful service as president for 37 years, declined reelection."

Of his work, Prof. R. Means Davis had the following to say in a short article in a publication entitled "The

Centennial celebration of the granting of the charter to South Carolina College:"

"While his favorite study was astronomy, he was at home in almost every branch of modern science. The variety of his knowledge was as remarkable as its range. Natural history was a branch which he eagerly pursued, and in which he was the colleague of Agassiz, of Holbrook and of Bachman. As an astronomer, he made many practical calculations. Next to astronomy, botany engrossed his affections. His mind possessed the range of the telescope, the accuracy of the microscope, and the variety of the kaleidoscope. Prof. Gibbs was always a teacher; not only as a duty, but at home, by the way, everywhere as well as in his chair as a public teacher. He proclaimed the same lofty ideal as was embodied in the remark of Agassiz: 'I have no time to make money.'

* * * * *

"The wife of a professor in Yale, who knew and honored him, thus writes of his burial place: 'And now he lies at rest under the live oaks and magnolias, and the little plants he loved and knew so well will bloom above him, and the stars he traced in their courses will shine down upon him in the earth of his own well-beloved and native land.' "

To his work, the following tribute was paid by one of his life-long friends, the Rev. C. C. Pinckney: "The trees, the flowers, the shrubs, the grapes, the seeds, the fruit all engaged his scientific eye. From the scanty herbage on the seashore to the lofty firs of the Alleghanies, the vegetable kingdom was his familiar friend."

BIBLIOGRAPHY.

Gibbes, Lewis R.—"A Catalogue of the Phaenogamous Plants of Columbia, S. C., and Its Vicinity."—Pamphlet. 1835.

—"Accentuation of Names in Natural History." Vol. I, Proceedings Elliott Society. 1857.

—“Convenient Form of the Aspirator,” Vol. I, Proceedings of Elliott Society, 1858.

—“Botany of Edings’s Bay,” Vol. I, Proceedings of Elliott Society, 1857.

—“Notice of the Phenomena Attending the Shock of the Earthquake of December 19, 1857. Vol. I, Proceedings Elliott Society, 1857.

—“Monograph of Genus *Cryptopodia*,” Vol. I, Proceedings Elliott Society, 1854.

—“Description with Figures of Six Species of *Porcellana* Inhabiting Eastern Coast of North America,” Vol. I, Proceedings Elliott Society, 1854.

—“Description of *Ramlia Muncata*,” Vol. I, Proceedings Elliott Society, 1857.

—“Discovery of a New Species of Fir in the Mountains of North Carolina; Allied to Abre’s Canadensis. Purpose to Call it Abre’s Carolinensis. Proceedings Elliott Society, 1858.

—“On the Occultator,” Vol. I, Proceedings Elliott Society, 1868.

—“Synoptical Table of the Chemical Elements,” Vol. II, Proceedings Elliott Society, 1875.

—“The Identity of the Comets, 1886 b, 1844 b, and 1678.” Proceedings Elliott Society, Vol. II.

—“Observations of Earthquake of 1886,” Vol II, Proceedings Elliott Society, 1887.

—“Note on *Pieris Rapae*,” Vol. II, Proceedings Elliott Society, 1887.

—“A Portable and Easily Made Heliotrope,” Vol. II, Proceedings Elliott Society, 1887.

—“Note on the usual Methods of Demonstrating the Arithmetical Rule for Finding the Area of a Triangle when the Three Sides Are Given,” Vol. II, Proceedings Elliott Society, 1887.

—“Notice of Stalactites Formed in Artificial Structures,” Vol. II, Proceedings Elliott Society, 1889.

FRANCIS PEYRE PORCHER.

Francis Peyre Porcher, physician and botanist, was born in St. John's, Berkeley Parish, Charleston, S. C., December 14, 1825. He was descended from Isaac Porcher, a French Huguenot, who emigrated from France at the time of the persecution of the Huguenots by the Catholic Church as a result of the revocation of the Edict of Nantes by the harsh and impolitic act of Louis XIV. His preparatory training was received at the Mount Zion Academy, and in 1844 he was graduated from the South Carolina College with the degree of A. B. From the Medical College of South Carolina at Charleston, he was graduated in 1847 with the degree of M. D., taking the first honor place in a class of seventy-six medical students. His thesis, which was published by the College faculty, was entitled "A Medico-Botanical Catalogue of the Plants and Ferns of St. John's, Berkeley, South Carolina." Dr. Porcher afterward spent two years in attendance upon the medical schools in Paris, also passing some time in Florence, Italy, where he acquired a knowledge of the Italian language.

Dr. Porcher returned to Charleston, S. C., and assisted in establishing the Charleston Preparatory Medical School, and was subsequently elected professor in the chairs of clinical medicine and of materia medica and therapeutics in the Medical College of the State. He was for five years one of the editors of the "Charleston Medical Journal and Review," and also assisted in editing and publishing four volumes after the War Between the States. He prepared by order of the Surgeon-General of the Confederate States a volume of over 700 pages, entitled "The Resources of the Southern Fields and Forests." This was essentially a medical botany of the Confederate States. The book was

FRANCIS PEYRE PORCHER
A. B. 1844, South Carolina College

of such value and interest as to warrant the issuance by its author of a revised edition in 1869.

Dr. Porcher, with his two brothers, served throughout the War Between the States. He was surgeon to the Holcombe Legion, to the Naval Hospital at Norfolk harbor, and to the South Carolina Hospital at Petersburg, Va. His contributions on medical subjects to medical publications have been numerous and valuable. Articles from his pen appeared in "The American Journal of the Medical Sciences," "The Charleston Medical Journal and Review" and other journals North and South. Some of his most important contributions were upon yellow fever, diseases of the heart, and on the medical and edible properties of cryptogamic plants and on gastric remittent fevers.

Dr. Porcher was president of the South Carolina Medical Association, of the Medical Society of South Carolina, and vice-president of the American Medical Association. He was a member of the American committee of the World's International Medical Congress, and also at the meeting in Rome, Italy, 1893. He was also president of the section on General Medicine, Pan-American Congress in 1892; member of the Association of American Physicians, and an Associate Fellow of the College of Physicians in Philadelphia. The degree of LL. D. was at the commencement in May, 1891, conferred upon him by the University of South Carolina. He collected as a part of his botanical work a considerable number of plants for preservation, and this herbarium of his is now in the possession of the Charleston Museum.

Bibliography.

Porcher, Francis Peyre.—"Medico-Botanical Catalogue of the Plants and Ferns of St. John's, Berkeley, S. C.," 1847.

—"Sketch of the Medical Botany of South Carolina." 1849.

—“Medicinal, Poisonous and Dietetic Properties of the Cryptogamic Plants of the United States,” (being a report made to the American Medical Association at its session held at Richmond, Va., and St. Louis, Mo.) 1854.

—“Resources of the Southern Fields and Forests.” Pub. by order of the Surgeon-General, Confederate States of America. 1863.

—“Resources of the Southern Fields and Forests.” (Second edition.) 1869.

—“Illustrations of Disease with the Microscope. Clinical Investigations, with upwards of five hundred original drawings from Nature and one hundred and ten Illustrations in Wood.” 1860.

JOSEPH HINSON MELLICHAMP.

Joseph Hinson Mellichamp, physician and botanist, was born in St. Luke's Parish, South Carolina, May 9, 1829. His father was for many years preceptor of Beaufort College, and afterwards was pastor of St. James Church, on James Island. Himself a lover of outdoor life and of natural objects, he influenced the tastes of his son in the same direction and especially for botany, an influence which continued throughout his life.

In 1849 Joseph Hinson Mellichamp was graduated from South Carolina College and in 1852 from the Medical College at Charleston. He then spent some time in Europe, studying in the hospitals of Dublin and Paris. On his return he established himself as a physician at Bluffton, S. C., and here he remained most of his life, the exceptions being the time when he was a surgeon in the army of the Confederacy, and when, during the last years, much of his time was spent with his daughter and only child in New Orleans.

His extended practice among the planters and their dependents made strong demands on his time, but he found time for much botanical research and collecting. In the interesting floral region around him were many of the rarer species described by Walter, Michaux and Elliott. Specimens of these were much prized by the botanical fraternity and, through his correspondents were largely and freely distributed, finding their way into, and retaining at the present time, a place in many of the best herbaria.

His advantageous location and familiarity with the flora of his locality brought him into intimate touch with many of the contemporary botanists of note. In "The Botanical Works of the late George Englemann," edited by Wm. Trelease and Asa Gray, 1887, under

the caption "Notes on the Genus *Yucca*," Englemann has the following to say: "Within the past two years an unpretending physician of South Carolina, Dr. J. H. Mellichamp, who does not even claim to be a botanist, but is imbued with arduous zeal and keen sagacity and who lives right among the *Yuccas*, has wonderfully improved his opportunities, and has very greatly aided me in my investigation by specimens as well as by his observations. I may add here that also on other families of plants of his rich State, already so long and well known through the labors of a Walter and an Elliott, have his researches shed new light as will appear in future pages of these transactions.

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"Dr. Mellichamp's notice of a minute drop of glutinous liquid in the tube formed by the coalescence of the so-called stigmas led me on to further experiments. That tube proved to be the real stigma, exuding stigmatic liquor and insects (in these night-blooming flowers, of course, nocturnal insects) must be the agents which introduced the pollen into the tube."

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Under his treatment of the "*Coniferae*," he says at the conclusion of his description of *Pinus Elliottii*, Engelm, New Species:

"*P. Elliottii* was imperfectly known to Elliott and was considered by him a form of *P. Taeda*. Later botanists ignored it, till Dr. J. H. Mellichamp, of Bluffton, S. C., rediscovered it about ten years ago, and directed my attention to it. Without his diligent investigations, ample information and copious specimens, this paper could not have been written. * * * I am particularly indebted to Messrs. Bolander, Brewer, Parry, and Lemmon for their contributions of the Californian and Rocky Mountain Conifers, and to Messrs. Canby, Gilman, Ravenel, and Mellichamp for those of the Northern and Eastern American Pines."

Sargent in his *Silva of North America* says of Dr. Mellichamp that "he rendered substantial service to

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science" * * * "and I am glad to take this opportunity to acknowledge my indebtedness to him for the assistance he has rendered me by studying the trees, and especially the oaks of the Carolina Coast Region." Dr. Asa Gray also noticed him in a highly complimentary way.

A botanist contemporary with Dr. Mellichamp, W. H. Canby, has the following to say in the *Torreya*, Vol. 4, No. 1, January, 1904, with regard to the work and character of the man:

"His good judgment in making observations and clear statements of the results brought him the correspondence and esteem of Doctors Gray, Engelmann and other masters of the science. For Dr. Englemann he investigated the flowering and fruiting of some species of *Yucca*, the peculiar oaks of his region, and especially *Pinus Elliottii*, which he practically discovered, and, in the excellent notes he furnished, adequately described. Very acute observations on the insectivorous habits of *Sarracenia variolaris* were published in the Proceedings of the American Association for the Advancement of Science. In this paper he recorded his discovery of the lure by which insects are tempted to the fatal pitcher of the leaf; of the fact that the secretion therein is more or less of an intoxicant; and the curious fact that the larva of a certain insect was able to resist the secretion and feed upon the decaying mass. Dr. Sargent, in his *Sylva* of North America, acknowledges his services in the studies of oaks and other trees. Dr. Gray so esteemed his assistance that he named a Mexican *Asclepiad* in his honor, *Mellichampia*. Desirous of helping others, he was one of those men who, diffident and retiring, and not caring to advance their own fame, always willingly give others the benefit of the knowledge they have acquired. It is not too much to say that but for him considerable of value would have remained unknown of the flora of his district; grateful acknowledgments of this have come from European as well as American botanists.

"Dr. Mellichamp was an ardent lover of nature, with a poetic and artistic spirit, and his letters teem with fine descriptions of the various objects which attracted him in his professional drives about the country. He was wont, as the spring approached, to speak of the exceeding beauty of the young flowers of *Pinus Elliottii*, as they expanded their cones over the trees, crowning their robes of green with a haze of purple. His letters show the keenest sense of the loveliness and delicious warmth of a spring in the pines with flowers opening everywhere, the fragrance of the woods, of jessamine and of magnolias filling the air made vocal with the songs of mocking birds.

"But best of all, he was a man to be loved for his qualities of heart and mind. A magnetic and attractive man, his friends and correspondents cannot forget his ready kindness and words of cheer, and will cherish his memory. He was loved by the poor people of his district, who, in a touching way, mourned the loss of their 'old doctor' as his body was borne to the grave. As might have been supposed, he was intensely Southern in his feelings and in his love for his native State. He now rests in her bosom; and the well known lines, slightly altered, may well be applied to him: "Little he'll reck if they let him sleep on in the grave where a Southron has laid him.' "

The following notice appeared in the Botanical Gazette for November, 1903: "Dr. Joseph H. Mellichamp, an ardent student of the Southern flora, died October 2, in James Island, S. C."