



CHARLES WRIGHT (1811-1885)

Collectorum longe princeps



1. Pinar del Rio
2. Havana
3. Matanzas
4. Las Villas

5. Camagüey
6. Oriente
7. Isla de Pinos

CHARLES WRIGHT (1811-1885) IN CUBA
AS REVEALED BY HIS LETTERS

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AMONG the best known collectors of Cuban land shells is the Connecticut-born botanist, Charles Wright. Ludwig Pfeiffer, who described and named most of the shells collected by Wright, credited him with discovering some 30 new species besides contributing much important ecological and distributional data. In addition, Rafael Arango frequently cites Wright as the source of much of the data which he published in his superb annotated catalog of Cuban shells (1878-1880).

Wright was an avid collector of natural history objects, especially plants. 'Princeps longae collectorum,' (by far the first among collectors) is what the German botanist A.H.R. Grisebach called him because of the wealth of new botanical material he sent from Cuba. Grisebach was one of several botanists who were associated with Wright, the most important of whom was Asa Gray of Harvard. Much of the data included in this report was derived from the large number of letters written by Wright to Gray which are preserved in the library of the Harvard Herbarium in Cambridge, Massachusetts.

Charles Wright was born on October 29, 1811, the second son in a family which was to consist, besides himself, of his older brother John and two younger sisters, Mary Ann and Abigail. Their father was a carpenter and farmer but their mother, Mary Goodrich, came from an early Connecticut family in comfortable circumstances and with some members notable in politics and the arts. In 1831 he was matriculated in Yale from which he was graduated in 1835 as a land surveyor. For a time he thought of pursuing a medical career, but he was unable to continue for lack of means. It was as an undergraduate in Yale that he developed a strong taste for botany, though apparently without benefit of formal instruction in that field. Botany as such was not taught at

Yale in the 1830's. After a brief period as a tutor in Natchez, Mississippi—botanizing at every opportunity—he migrated to the new Republic of Texas in 1837, earning his living as a surveyor and private tutor. He remained in Texas until 1852.

During the Mexican War he served in a company of volunteers raised by his friend Dr. Veitch, but there is nothing to show that this group saw any action. He later obtained leave to join a small company of troops which traversed the unexplored territory between San Antonio and El Paso. In 1851 he joined the surveying party under Col. J. D. Graham, one of the commissioners who established the boundary lines with Mexico from the Rio Grande to the Pacific Ocean. His name is included in the list of those who were 'attached to the Survey at various periods and made collections of natural history objects.' (Meisel, 1929, 3: 99). Wright left the expedition in the southwest corner of Arizona after it had traversed much unexplored territory. The plants collected on this trip were among those written up in *PLANTAE WRIGHTIANAE* (1852-1859) by Asa Gray of Harvard, who became Wright's warmest friend and chief patron. Their correspondence and personal contact began in 1844 and lasted until Wright's death.

In 1853 Wright was a member of the North Pacific Exploring Expedition under the command successively of Capt. Ringold and Commander John Rogers, which visited the Cape of Good Hope, Hong Kong, Borneo, the Loochoo (Ryuku, Bonin) Islands, Japan, Kamtschatka, Kiene or Arkantschatschene Island in the Bering Straits, and California.

The expedition, which sailed from Norfolk on June 11, 1852, consisted of 5 ships, including the sloop 'Vincennes' on which, in addition to Wright, the zoologist William Stimp-

son and the botanist F.H. Storer were aboard. It was while Stimpson was studying the invertebrates, including 2359 mollusks, collected on this expedition that the disastrous fire of 1871 destroyed the museum in Chicago and all the work Stimpson had done. He never recovered from the blow and died soon after. Parenthetically it might be noticed that on November 5, 1865 Wright is credited with contributing to the Museum of Comparative Zoology at Harvard 955 specimens of shells from Hong Kong, China. These may well be part of the material collected on the expedition. Wright left the expedition when it reached San Francisco, California. He returned, via San Juan del Sur and Greytown, Nicaragua, to Cambridge, Massachusetts where, together with Gray, he worked on the plants he had collected.

In the autumn of 1856 he made his first trip to Cuba visiting the area around Santiago and other regions in the Province of Oriente. He stayed until the autumn of 1857 as a guest at the ranch of Federico Lescaille in Monteverde. On this trip, Wright collected in the El Cobre Mountains, Loma del Gato, Minamina, Saltadero and other areas to the west and north, as well as in the surroundings of Monteverde. During his excursions to the northern coast he stopped at various *hatos* or cattle ranches.

He returned briefly to the United States in 1857, but returned to Cuba at the end of 1858. Apparently he was no better a sailor than Charles Darwin on the Beagle, for he writes off St. Iago (Santiago) (November 25, 1856) 'The babe's portion of food I ate would not stay eaten.' Between 1858 and 1861 he explored the vast region of the Sierra Maestra, as well as such areas as Monte Libano, Pico del Toro, Bayamo, the shores of the Río Cauto, Cuba's largest river, Punta de Maisi which is the extreme eastern tip of the island, Baracoa, and Mayari. Pfeiffer (1862:1) wrote that on these excursions Wright sent him many shells from areas previously visited by Gundlach, but 'he also went to places where Gundlach had not been, namely the region between Santiago and Mayari' (translated).

In the winter of 1861-62 accompanied by Gundlach, he traveled as far west as Camagüey Province and Sancti Spiritus in Las Villas Province where he paid a visit to the large swamp, the Ciénaga de Zapata.

Wright made his first trip to the Vuelto Abajo in Pinar del Río Province in Western Cuba in the early summer of 1862. He stayed, among other places, at Balastena (Valastena) at the southern foot of the mountains near Bahía Honda, at the ranch of Don Jose Blain, the son-in-law of the botanist Francisco Adolfo Sauvalle, who was to incorporate many of Wright's observations in his *FLORA CUBANA*

(1873). Blain was an enthusiastic botanist and naturalist in his own right. In his estates, here and at El Retiro, he was the open-hearted host to many naturalists such as Morelet—who received many of the Cuban land mollusks which he later described in *TESTACEA NOVISSIMA INSULAE CUBANAE* (1849, 1851) from Blain—as well as Arango, Poey, Gundlach and many other botanists and entomologists. Wright visited the entire area of the Sierra de los Organos and even journeyed as far as the barren western tip of Cuba to Cabo San Antonio.

After a brief visit to Cambridge in 1864 he returned to Cuba and between 1865 and 1867, his last years in Cuba, he traveled by steamer from the Vuelto Abajo in Pinar del Río to Trinidad in Las Villas Province in central Cuba, and then to the east at Guantánamo and Santiago de Cuba. Here he found that his former host and good friend Lescaille had died.

In Cuba he early came in contact with Dr. Felipe Poey y Aloy the dean of Cuban naturalists and one of the most versatile and talented personalities of the New World who deserves to be much better known in our own country (Jacobson, 1972). He also met and became quite intimate with Juan (Johann) Gundlach, the gentle Cubanized German naturalist whom he adored. 'I shall consult with my friend Gundlach about obtaining a new pack-horse, for a better man don't live on 'top o' ground,'" he wrote. 'He reminds me of the moral character, conscientiousness etc. of Cooper's 'Pathfinder.'" On Jan. 1, 1862, he writes: 'Gundlach knows all the good places about there and his name is a passport to go anywhere. He is a most zealous zoologist so exclusively given to science that he never looks at a newspaper. I have brought and sent him at times new shells and that even if he had any selfishness, which he has not, would have put my name in his books. I first made his acquaintance in Yateras /Oriente/'. Wright also set in motion a project to obtain contributions from each of the people who had received presents of natural history objects from Gundlach, the money destined for the purchase of a science library to be presented to Gundlach as a 'token of respect for his character as a man and for his industry in the cause of science.' Wright headed the subscription list with a donation of \$50, a rather large sum for the day and for the usually financially straitened man from Wethersfield.

Finances seemed always to have been a problem for Wright during his stays in Cuba. Most of his collecting trips were financed, even if only partially, by Asa Gray. In his last letter to Gray, August 3, 1885—Wright died on August 11—he wrote: '... it was always understood that the Herbarium Gray was to have as full a set as possible of everything of my gatherings, and even thus I can

never repay the many services you have rendered me.' Most of those services, as appears in frequent references in his letters, were financial. But Wright also tried to raise funds through the sale of duplicate sets of plants to other institutions as well as other natural history objects, such as birds, mammals, spiders, insects, shells etc. During the Civil War it was hard to transfer funds to Cuba and this added another source of worry. On October 13, 1862 he wrote that he had to take a 40 percent discount on U. S. dollars. It is likely that some of his money came from the family, for his older brother, John, farmed several plots of ground in Wethersfield. In 1899, eleven years after the death of John, the surviving sisters, Abigail and Mary Ann, were able to donate seven pieces of land in Wethersfield and neighboring Hartford to the Children's Aid Society, indicating that the family was never really destitute. None of the four Wright siblings ever married.

Years ago, when I was collecting in Cuba, my Cuban companions told me that Carlos Wright was a crazy old man with a wild white beard who travelled on foot all over Cuba with a pack on his back, collecting plants and shells, a sort of naturalist tramp. Henderson (1916: 36) writes that Wright had a 'long patriarchal beard' and that he was 'taciturn and unsocial,' and that 'without speaking a word of Spanish, he traversed the length of the island afoot leading a little donkey upon which he packed his precious collections.' Neither of these descriptions jibe with the man who wrote the warm, friendly letters to Asa Gray and other correspondents. Wright was always warmly received in the many *hatos* or ranches where he stayed, among which were such well known places as Monte Verde, Balastena, Filantropia, Retiro, Santa Catalina de Guasa and others. While at rest in these usually well-kept ranch houses he wrote most of his letters to Asa Gray. To these ranches he brought letters of introduction from his friend Gundlach. Of course, like all collectors, he had to rough it in the field, 'for weeks at a time /sleeping/ in caves /eating/ wild honey, and /living/ like an aborigine (sic)' to quote Henderson (1916: 37).

Once in the field, he stayed where he could most profitably collect. In a letter from the Vuelto Abajo (Dec. 10, 1862), he wrote that he preferred to rough it in a tumbledown *ingenio* (sugar mill) where the plants and shells were, rather than stay in more comfortable quarters in a pueblo or town nearby. Nevertheless he looked to his comfort wherever possible and usually had two horses with him, one to mount and one to pack.¹ His command of Spanish may not have been very great,

¹ Cf. letter from Concordia, May 25, 1863: 'My packhorse is dead and all my plans upset. I can do little with one horse and have no means to buy another, even if I had the inclination.'

but his letters show that he was not completely helpless in it. He probably knew enough to make his way among the peasantry. Besides, on some of his trips, he had the completely Cubanized Juan Gundlach with him as his companion.

His letters to Asa Gray written in a beautiful, strong, spencerian hand on thin blue or white letter paper, are full of accurate and detailed botanical observations which will in time, I have been informed, appear in a special botanical publication now under preparation.

Wright reveals himself to be a generous, indefatigable, humorous, extremely literate and eloquent personality who was, however, not without his peppery and explosive side. He is particularly irked by the inefficient and corrupt Spanish authorities who were slow and undependable in issuing the numerous 'licencias' needed for collecting, traveling, shipping his plants to America, and even the right to live in Cuba (*permiso de domicilio*). The lackadaisicalness and greed of the U. S. Consul in Santiago de Cuba brings forth a particularly bitter outburst (Jan. 10, 1860). 'Our purse-gathering gutter consul ain't worth a pinch of ----!' (Wright's dash). He can't talk English much less Spanish. Nobody but the old bragging self-conceited Capt. Cochrane!!! Bah!!! He is a disgrace to our government!!! He engaged in a long and lively duel with Asa Gray about the merits of the Civil War, to which he was bitterly opposed. On October 25, 1862, soon after a return to Cuba from the States, he writes: 'I don't care to take any part in the Kilkenny-cat scuffle. I hoped to see the Union restored. That hope has grown fainter every day till there is hardly a shadow left.' Four days later he writes: 'It is a well known fact that children often undo things their fathers did, put down what their fathers built up . . . I don't mean to say that I approve the course of South Carolina. But I do say the war will not reestablish the Union. Hence it is useless, worse than useless --wicked!' On June 15, 1863 he chides Gray who apparently had become more bitterly anti-Rebel and pro-Union. 'At the beginning you were going to 'restore the Union' quicker than a cat could lick her ear. Now that you can't do this, it is 'wallop the rebels,' 'work them to utter desolation,' 'give em Hell and pay it down'." When Gray unwisely wrote that when Wright returned he should 'be a good and peaceable citizen (subject) of A. Lincoln's dominions,' Wright's letter sizzles with indignation. He had left a republic and now it was converted to a tyrant's dominions. 'Here /in Cuba/ I am free /even/ in a military despotism, and here I mean to stay until times become better at home.' On July 15, 1863 he accused Lincoln of trying to win the election by tricky means. 'Republican soldiers were sent home to vote while Democrats were retained to keep their posts and be killed off.' But after Gettysburg and the fall of New Or-

leans he writes, somewhat chastened, that he was glad the war was coming to an end.

Other things also infuriated him. His friend Gundlach had sent a new sphingid moth, apparently a paratypic specimen, to the German entomologist Grote, and thought the insect could not have reached Grote before late in December 1866. Grote dated his description November 27, 1866 to win priority over Gundlach's work. 'Don't,' added Wright in his letter to Gray, 'let him have any more of my insects.'

Nor was he much pleased with Grisebach's monumental works on his collections: *PLANTAE WRIGHTIANAE E CUBA ORIENTALI* (1866) and *CATALOGUS PLANTARUM INSULA CUBA MISSAS* (1866). He found in them 'many errors, more defects and a good many superfluties.' He noted that a revision would require immense labor. This revision, together with the description of many new species, appeared in Sauvelle's *FLORA CUBANA* (Havana, 1873). When Grisebach failed to acknowledge his shipments and letters promptly, Wright stated that he feels 'growly' about it (March 25, 1866).

Even Gray is not entirely free from the barbed bolts of Wright's fury. 'Pray,' he wrote on November 8, 1859, 'don't fill up your letters & waste valuable time in giving me advice as to what is best for me to do. If you were here & knew as much as I do about the weather, the roads, the state of vegetation etc. etc. I won't receive, very thankfully, any counsel you might offer.' And on July 14, 1860: 'Next time you are going to send me anything presently pray don't tell me about it. More than six or eight months before /you/ despatch it!' In a letter of August 15, 1863, he objected to the 'sneering' tone Gray takes toward Gundlach. 'Now just open your head wide enough,' he wrote, 'to admit the supposition that a Cuban is capable of doing a liberal or generous act while apparently engaged in a business transaction of all difficulty.'

There is no doubt that a good deal of this impatience was due to the frustrations Wright had to suffer—books, money, a microscope, even drying paper did not arrive on time; collecting conditions were difficult—'Up hill & down mud! mud! mud! slip, slide, horses and men, yards at a time, dirty and wet & but few novelties.' Occasionally he was made irascible by ill health: at various times he suffered from fever, dysentery, piles, and wrenched limbs, besides once almost blinding himself with an acrid plant juice. Living conditions were also often provoking: he had to eat with his fingers, sleep with dogs and other animals, and suffer attack from fleas. Yet at times he can rise above the latter with some humor. 'The most exquisite pleasure I have nowadays is killing fleas—when I can catch them. Oh ain't it the height of felicity to have in possession the lifeless carcass of

your enemy. Time was when I didn't care for a flea-bite. But *that time isn't now & those fleas weren't Monte Verde fleas.* I have been pretty well acquainted with the critters now for more than 20 years and till now I have always been content to give them breakfast dinner and supper if they would take it quietly and not gallop all over the most sensitive parts of my corporosity. The fact is these fleas are no locomotives. They are no tourists. They don't go prospecting. Whenever they alight at it they go & it's gouge, gouge till they are forcibly geched (?) from their posture, when they take incontinently to another & gouge gouge away. And such venomous scamps. Every puncture raises a great knot such as I never get from any other insect.' (February 5, 1859). On January 21, 1867 he wrote that he had had a severe fainting spell. 'What if such an attack should come on me when scrambling on one of the cliffs? *I must quit this work!*' (his emphasis). He left Cuba for the last time soon after May 1867. The next year, while living in Wethersfield, he wrote to Gray 'I want to go to Cuba and I want to stay here. Ambition says go; prudence says stay.' Prudence won out.

Nevertheless in 1871 he was again a member of an exploratory expedition to Santo Domingo to investigate the possibility and advisability of annexing the island to the United States. (This was the epoch of unashamed and blatant 'Yankee imperialism'). But the winter season was unfavorable and the trip hurried and unsatisfactory. He returned, after a brief stay, with a smaller collection than usual. After a severe illness in 1875, he spent some time in Cambridge working as librarian at the Bussey Institution of Harvard with Professor Storer, his associate on the Pacific cruise of 1853. After 1876 he spent the remainder of his life in his old home in Wethersfield. He died of 'hypertrophy of the heart' on August 11, 1885, three years before the death of his older brother John.

Asa Gray (1886:17) left a short description of Wright. 'Mr. Wright was in person of low stature and well-knit frame, hardy rather than strong, scrupulously temperate, but direct and downright in expression, most amiable, trusty and religious. He accomplished a great amount of useful and excellent work for botany in the pure and simple love of it; and his memory is held in honorable and grateful remembrance by his surviving associates.'

In connection with the naming of *Carlowrightia*, an acanthaceous genus of the southwest, Gray wrote: 'Surely no botanist ever better earned such scientific remembrance by entire devotion, acute observation, severe exertion and perseverance under hardship and privation.' Though Wright wrote nothing on the Cuban molluscan fauna, Cuban malacologists honor his memory as one of theirs, and the

pomatiasid genus *Wrightudora* Torre & Bartsch, 1941 was established in his name. In addition his name was attached to many species.

His portraits show a man with a strong squarish face, a fine brow, firm nose and lips, and determined chin, covered in later years by a rather scraggly gray beard. His appearance was adversely affected by a strong internal strabismus in his right eye, clearly shown in his later portrait (frontispiece).

Wright was more a collector than a student or writer. In his chosen field of botany he published only two works in his lifetime, the revision of Grisebach's CATALOGUS mentioned above and a note on *Jassioea* in volume 10 of the Journal of the Linnaean Society. Hence it must be clear that the descriptions of new molluscan species credited to him were in all likelihood not his work. Pfeiffer ascribed about 30 species to him but it is apparent that at most Wright suggested the name alone,² and the description must be credited to Pfeiffer. Thus for the species *Choanopoma hystrix* Wright, 1862 (Mal. Blatt. 8: 221) Pfeiffer wrote: 'Diese herrlich Art wurde von dem Amerikanischen Botaniker Herrn Wright, entdeckt und benannt,' (my emphasis). In at least two cases (see below) all that Pfeiffer received from Wright was the manuscript names; he did not get to see the shells and hence, published two nude names. A list of the taxa in question is appended below.

Though strictly speaking Wright was no specialist in shells, he showed considerable interest and astuteness in them. As we have seen, it is quite likely that he collected shells on the North Pacific Exploring Expedition. There are several references to shell collecting in his letters. On April 17, 1860 he wrote from Monte Verde in Oriente Province: 'Lately I have been dipping into zoology—saving some birds for Bain and picking up now and then some shells.' On June 16 of the same year he wrote that he had wrenched his knee but 'I have been more or less all the intervening time collecting shells, insects, etc.' On September 2, 'I was mainly after shells and eminently successful,' and on the 9th 'while I remain here /near Holguin, Oriente/ I'll be likely to discover something new or desirable in zoology (conchology) if not in botany.' Gundlach egged him on. From San José in western Cuba (September 28, 1862): 'being with Gundlach I devoted considerable time to the collection of shells.' We have seen that he gave many shells to Gundlach.

Conde (1958: 287) wrote of Wright that 'he was the first North American naturalist to

2 Even in botany he writes (May 3, 1859) that he was giving names only to new plants. 'So I have just put down what I thought would be a good name without any description.'

explore a tropical country extensively.' Malacologists can be grateful to Wright for having aided vigorously in the discovery of the superbly rich Cuban land molluscan fauna. Together with Poey, Gundlach, Arango, and Blain, de la Torre, Bartsch, and a few others—his name—even if only as a collector—is bound forever to the exciting days when this rich field of natural history was first coming to the attention of the scientific world.

I am indebted to the library staff of the Gray Herbarium of Harvard University in Cambridge, Massachusetts, and of the Academy of Natural Sciences of Philadelphia for their kindness in permitting me to read the Wright correspondence in their files. The library of Wethersfield, Connecticut aided me in several important ways in my investigation of the history of the Wright family. Mr. John Collins, the principal of the Charles Wright School in Wethersfield, kindly permitted me to photograph the pictures of Wright hanging in the school. Dr. William K. Emerson of the American Museum of Natural History was kind enough to read and check the manuscript.

MOLLUSCAN TAXA USUALLY CREDITED TO CHARLES WRIGHT

NOTE: The last nomen of each taxon is also provided. Abbreviations: MB, Malakozologische Blätter; MPV, Monographia Pneumonoporum Viventium.

- albviridis Wright 1864, Helicina. MB 11:108.
Semitrochatella albviridis (Pfeiffer)
- angustior Wright 1864, Cyllindrella. MB 11:130. *Gongylostoma (Gongylostoma) angustior* (Pfeiffer)
- arcustriata Wright 1864, Cyllindrella. MB 11:3. *Gongylostoma (Scopulospica) arcustriata* (Pfeiffer)
- cirratum Wright 1867, Cyclostoma. MB 14: 210.
Hendersonia (Scobinopoma) cirrata (Pfeiffer)
- clara Wright 1865, Cyllindrella. MB 12: 119.
Gongylostoma (Liocallonia) clara (Pfeiffer)
- crystallina Wright 1865, Cyllindrella. MB 12: 120. *Hendersonina (Hendersonida) discolorans* (Pfeiffer)
- echinulatum Wright 1863, Chondropoma. MB 10: 184. *Turrithyra (Turrithyretes) echinulata* (Pfeiffer)
- echinus Wright 1864, Cyclostoma (Choanopoma). MB 11:102. *Blaesospira echinus* (Pfeiffer)

- erythraea Wright 1866, Helicina. Thes. Conch. 3: 284, pl. 278, figs. 461-463. *Troschelviana* (*Troschelviana*) *erythraea* (Sowerby)
- fusiformis Wright 1864, *Cylindrella*. MB 11: 12. *Gongylostoma* (*Gongylostoma*) *fusiformis* (Pfeiffer)
- garciana Wright 1865, *Cylindrella*. /in/ Poey, F., Reportorio fisico-natural isla de Cuba, Habana, 1: 220. *Gongylostoma* (*Gongylostoma*) *garciana* (Presas)
- hernandezi Wright 1876, Helicina. MPV supp. 3: 287. Synonym of *Troschelviana* (*Troschelviana*) *chrysochasma* (Poey). Note: This taxon appeared as *Eutrochatella* (*Ustronia*) *chrysochasma hernandezi* 'Wright,' Wagner /in/ Martini & Chemnitz, Conchylien-Cabinet (2), 1: sect. 18, pt. 2, p. 128, pl. 25, figs. 3-4). It is surprising that Wagner took this to be *hernandezi* Wright, since Pfeiffer had not described it. Pfeiffer merely listed it as one of the 'Species quarum descriptiones non vidi.' It is also worthy of note that Wagner gave no bibliographical reference for the nomen.
- hystrix Wright, 1862, *Choanopoma*. MB 8: 221. *Xenopoma hystrix* (Pfeiffer)
- illamellata Wright 1864, *Cylindrella*. MB 11: 130. *Conchloclinella illamellata* (Pfeiffer)
- incrassatum Wright 1863, *Chondropoma*. MB 10: 183. *Chondrothyretes incrassata* (Pfeiffer)
- infradenticulatus Wright 1864, *Macroceramus*. MB 11: 127. *Microceramus infradenticulatus* (Pfeiffer)
- macra Wright 1867, *Cylindrella*. MB 14: 210. *Gongylostoma* (*Badiofaux*) *macra* (Pfeiffer)
- maculatus Wright 1865, *Macroceramus*. MB 12: 119. *Microceramus maculatus* (Pfeiffer)
- mixta Wright, 1865, *Cylindrella*. MB 12: 120. *Conchloclinella mixta* (Pfeiffer)
- montana Wright 1864, Helicina. MB 11: 160. Synonym of *Alcacia* (*Penisoltia*) *minima* (d'Orbigny)
- percassa Wright 1864, Lincia? MB 11: 157. *Chondrothyra* (*Hendersonoma*) *percassa* (Pfeiffer)
- plumbea Wright 1864, *Cylindrella*. MB 11: 129. *Gongylostoma* (*Badiofaux*) *plumbea* (Pfeiffer)
- pterostomum Wright 1865, *Cyclostoma*. MPV supp. 2, p. 106 (nomen nudum). NOTE: Pfeiffer refers to *Cyclostoma pterostomum* Gundlach 1858 /in/ Poey, Memorias historia natural isla de Cuba 2: 405, anomen nudum. Synonym of *Xenopoma hystrix* (Pfeiffer)
- pulverulentum Wright 1864, *Ctenopoma*. MB 11: 103. *Eutudorops* (*Eutudorex*) *pulverulentum* (Pfeiffer)
- rubella Wright 1864, Helicina. MB 11: 107. non J. Green 1833. Synonym of *Troschelviana* (*Troschelviana*) *erythraea* (Sowerby)
- sinuosum Wright 1863, *Chondropoma*. MB 10: 185. *Turrithyra* (*Turrithyretes*) *sinuosa* (Pfeiffer)
- striatella Wright 1864, *Cylindrella*. MB 11: 2. *Gongylostoma* (*Pycnoptychia*) *striatella* (Pfeiffer)
- subtussulcata Wright 1863, *Helix*. MB 10: 199. *Jeanneretia* (*Guladentia*) *subtussulcata* (Pfeiffer)
- teneriensis Wright 1865, *Cylindrella*. MB 12: 121. *Gongylostoma* (*Esochara*) *teneriensis* (Pfeiffer)
- vignalensis Wright 1863, *Chondropoma*. MB 10: 189. *Chondropometes* (*Chondropometes*) *vignalensis* (Pfeiffer)
- vignalensis Wright 1864, *Cylindrella*. MB 11: 3. *Gongylostoma* (*Badiofaux*) *vignalensis* (Pfeiffer)
- violacea Wright 1864, *Cylindrella*. MB 11: 128. *Gongylostoma* (*Badiofaux*) *violacea* (Pfeiffer)

LITERATURE CITED

- ARANGO Y MOLINA, RAFAEL (1878-1880) Contribucion a la fauna malacologica cubana. -- Havana, pp. 1-280, 1-35 (index and errata).
- CONDE, JOSÉ A. (1958) Historia de la botánica en Cuba. --Havana, 16, 353 pp., 77 figs., 2 maps.
- GRAY, ASA (1886) Botanical necrology for 1885. -- Amer. Jour. Sci. 31: 12-17.
- HENDERSON, JOHN B. (1916) The cruise of the Tomás Barrera. --New York and London, 320 pp., 42 pls., 1 map.
- JACOBSON, MORRIS K. (1972) Malacology in Cuba. -- Sterkiana no. 45: 37-42.
- MEISEL, MAX (1929) Bibliography of American Naturalists. -- Premier Publ. Co., New York, vol. 3, xii, 749 pp.
- PFEIFFER, L. (1862) Zur Molluskenfauna von Cuba. -- Malak. Blätt. 9: 1-10.