

culatis; lateralibus elongatis, angustis, æqualibus; umbonibus inclinatis, erosis.

Long. $2\frac{2}{3}$, lat. $2\frac{1}{2}$, diam. $1\frac{1}{3}$ poll.

Hab. In flumine Palembang prope Pardana, in insula Java (*Coll. Prime*).

2. BATISSA SOLIDULA, Prime.

B. testa ovato-orbiculari, æquilaterali, crassa, solida, latere antico dilatato, postico latiore, epidermide polita atro-fuscescente vel olivacea vestita; valvis intus albis, ad margines inferne posticeque violaceis; cardine incrassato; dentibus cardinalibus subæqualibus; lateralibus elongatis, angustis, serrulatis; umbonibus prominentibus, integris, antice inclinatis.

Long. $2\frac{1}{3}$, lat. $2\frac{1}{3}$, diam. $1\frac{1}{3}$ poll.

Hab. —? (*Coll. Cuming et Prime*).

3. PISIDIUM NOVÆ ZELANDIÆ, Prime.

P. testa minuta, ovali, valde obliqua, tenui, fragili, postice subtruncata, umbonibus obtusiusculis, approximatis, epidermide corneo-flavescente vestita.

Long. $\frac{1}{5}$, lat. $\frac{1}{7}$, diam. $\frac{1}{10}$ poll.

Hab. In Nova Zelandia (*Coll. Cuming et Prime*).

2. DESCRIPTIONS OF TWO NEW SPECIES OF HELICTER (ACHATINELLA, SWAINS.), FROM THE SANDWICH ISLANDS, WITH A HISTORY OF THE GENUS. BY W. HARPER PEASE.

We venture to add two species to the above genus, and to adopt the generic name given to this group by Férussac, as having priority over that of *Achatinella* of Swainson. The history of the genus will, we think, justify us in so doing. Not having met with any account of it in a connected form, we offer the following to be filled out hereafter by those abroad who have within their reach materials we cannot command in this corner of the world.

It is not probable that any specimens of this genus were collected by Capt. Cook, or those attached to the expedition under his command, as they anchored on their first visit at the most leeward island of the group, Kauai, and, on their return from the north-west coast of America, at the most windward, Hawaii, having but little or no communication with the intermediate islands. With the exception of one species, rarely met with on the mountains in the interior of Hawaii, none but small ground species inhabit either of the above islands, the true *Helicteres* being confined to the central islands of the group.

The earliest notice we find of any species of this genus is in the narrative of the first commercial expedition that visited the islands after their discovery by Capt. Cook. It consisted of two vessels, the one under command of Capt. Portlock, the other under Capt. Dixon:

each of these officers published a narrative of his voyage, in London, 1789, in a separate volume.

The latter purchased from the natives at Oahu a necklace made of the *H. lugubris*. In an appendix to his narrative he gives descriptions of several objects of natural history collected in the Pacific, including the above species, under the name of "*Helix apex-fulva*," illustrated by a good figure. In the year 1795 Chemnitz closed his great work with descriptions of a number of new species of shells from the Pacific, many of which had been lately purchased by Spengler (whose collection was considered the largest in Europe, and afforded Chemnitz many rare species) from a dealer in London. They included the shell described by Capt. Dixon; and, without much doubt, the specimens were from the necklace brought home by him. Chemnitz named it "*Turbo lugubris*." It is the oldest recognized species of the genus. In 1801 Lamarck described the same species in his '*Animaux sans Vertèbres*' as "*Monodonta seminigra*," having also purchased specimens from a dealer in London. He was misinformed as to the locality (Tahiti), and adds that "*La reine de cette île en fait des boucles d'oreille*." The dealer might have supposed that he would enhance their value by representing them as having ornamented a queen; he received two guineas for them. Delessert figures the specimen from Lamarck's collection on plate 37. fig. 2, and, quoting the locality from Lamarck, adds "*Il a été rapporté par le capitaine Cook*," also an error. Up to this date but one species was known. The several specimens described and figured can all be traced without much doubt to Capt. Dixon's necklace, which, having been purchased for a nail at Oahu, was sold (at the rate of those purchased by Spengler and the Paris Museum) for several hundred dollars in Europe.

Twenty years passed by before any other specimens found their way to Europe, although in the meantime the islands became the winter resort of the fur-traders from the north-west coast of America, and were visited by the French Expedition under La Pérouse, and that of the English under Vancouver. In 1820 the expedition under De Freycinet returned from the Pacific. Férussac having commenced that year the publication of his great work on land-shells, all the species collected by Quoy and Gaimard during their voyage were passed over into his hands for examination and description. Eight species appeared in a '*Prodrome*' published by Férussac in 1821, their generic character being well and accurately defined, under the name of *Helicter*, and were placed by him in his system under a subdivision (*Cochlogena*) of the *Helices*, it having been reported to him that the animal was similar to those of that family. The genus must therefore date 1821, not 1819, as noted by Drs. Gray and Herrmannsen. The copy of the '*Prodrome*' in our library has no date on its title-page; but we find at the commencement of the '*Tableau Systématique*' the date 1821, June, which we adopt, and which is probably correct, as the expedition from which his specimens were obtained did not reach Europe until 1820. Three years later, 1824, the '*Zoology of the Voyage of De Freycinet*' was published, in which

Férussac gives a monograph of the genus also under the name of *Helicter*, correcting the synonymy of the original species by Chemnitz, and adding two more from the collection of Quoy and Gaimard. In the year 1827 two of the above species were redescribed by Dr. Green in the 'Collection of the Maclurian Lyceum,' Phil. U. S.

In the 'Quarterly Journal of Science, Literature, and Art of the Royal Institution of Great Britain' for the year 1828, Mr. Swainson published descriptions of seven species, one of which was a synonym of the original species by Chemnitz, and one of a species by Férussac. He also defines their generic character, and establishes the genus *Achatinella*. No reference is made to previously described species, excepting that by Dixon and the "*seminigra*" of Lamarek, which he adopts as the type of his genus. His descriptions are introduced by a few remarks on the difficulty of determining generic characters from shells alone, and he reflects on continental authors for not adopting a more artificial system. He refers to the genus *Helix* as an example. We quote his words:—"The truth of these remarks will appear very obvious on looking to the genus *Helix*, as it was left by Linnæus, and as it was considered only a few years back, when the French writers still considered it only in the light of a genus, containing many hundreds of species. * * * The peculiar views of M. Férussac led him, in the first instance, to return to the old arrangement, so far as to consider these shells merely as a genus divided into subgenera, sections, &c. This view, however, he seems at length to have gradually abandoned, and virtually to admit, what indeed is quite obvious, that they constitute a family, and a very extensive one, comprising numerous minor groups or genera, many of which rest on striking dissimilarities in their animals, and all on certain and obvious characters in the shell." * * * "To characterize a new form, and to give it a name, is no longer looked upon as a dangerous innovation." Mr. Swainson appears to have carried out this idea in his latest systematic work on shells ('Treatise on Malacology'), as he there arranges the Testaceous Gasteropods under 360 genera and subgenera, 161 of which are his own.

H. and A. Adams (who cannot be accused of restricting the number of genera) reduce about seventy-two of them to the rank of synonyms.

In his latest work Mr. Swainson does not refer to the genus *Helicter*, but merely remarks that "we adopt M. Férussac's names whenever they have a right to priority, and are classical."

In the January number of the 'Bulletin des Sciences Naturelles,' of the following year (1829), M. Férussac published a rejoinder to the above article by Mr. Swainson, and claimed priority for his genus *Helicter*. We quote his words:—"Nous croyons devoir rappeler à M. Swainson que la gloire ne s'acquiert pas en donnant des noms nouveaux que personne ne respecte quand ils sont donnés sans motifs, mais en établissant des coupes fondées sur des caractères bien observés et réellement distinctifs, en saisissant les véritables rapports naturels des êtres, et en respectant ces rapports dans l'établissement des coupes de tous les degrés; nous ajouterons que, pour

l'honneur de la science et des savans anglais, nous sommes très-éloignés de penser que les naturalistes de cette nation aient abjuré les principes qui prévaudront toujours chez tous les bons esprits—ceux de ne reconnaître comme coupes méthodiques du système que celles qui sont fondées sur des caractères organiques, bien tranchés et de même valeur dans chaque ordre ou chaque famille naturelle. M. Swainson, s'il ne craint pas d'établir de mauvais genres, devrait au moins craindre que l'on ne l'accuse, ou d'ignorer ce que les autres ont fait, ou de passer leurs travaux sciemment sous silence, en établissant des divisions méthodiques et des espèces déjà instituées avant lui. Son genre *Achatinella* n'est que la copie, sous un autre nom, de notre groupe des *Helicteres*, établi d'abord dans notre 'Prodrome' et ensuite dans 'Le Voyage de M. de Freycinet.' Il eut été convenable de nous citer et de proposer alors franchement l'établissement de genre distincte de notre groupe des *Helicteres*, en discutant les raisons qui nous ont porté à le laisser parmi les *Helices*, notamment l'identité de leurs animaux."

This genus, so clearly established and justly contended for by Férussac, passed out of sight. The only authors, so far as we are aware, who have adopted it are Drs. Gray, Beck, and Herrmannsen. M. Deshayes has refused to acknowledge it, as well as *Partula* and other genera now universally adopted; but that should not lessen M. Férussac's claim, more particularly as the reason he alleges (a want of a knowledge of the animal) has been set aside by Eydoux and Souleyet in the 'Voyage de Bonite.' The name is classical and appropriate ("a drawn-out or extended coil"), and does not of necessity connect the genus with the family of *Helices*.

The next monograph following that by Férussac is from Dr. Pfeiffer in the 'Proceedings of the Zoological Society of London,' 1845, in which the Doctor not only adopts the generic name of Swainson, but also his specific names for those species which are synonymous with the earlier species described by Férussac. In subsequent monographs, however, by the same author, in his great work 'Monographia Heliceorum Viventium,' priority is assigned to the specific names given by Férussac.

In 1850 Mr. Reeve published a monograph in his 'Conchologia Iconica,' under the name *Achatinella*. All future describers follow Dr. Pfeiffer and Mr. Reeve's example. A full monograph and history of the species would require several years' laborious study and research. The most perfect list of synonyms that has appeared, more particularly of the earlier-described species, is that by Dr. Newcomb in the 'Annals of the New York Lyceum,' 1858.

The number described is about 325, of which (according to Dr. Newcomb) more than three-eighths are synonyms. We follow the rule laid down by Mr. Swainson, and adopt the name *Helicter* for this genus, being convinced that it is classical and has priority, and proceed to add two species as follows:—

HELICTER PROXIMUS.

H. testa sinistrorsa, imperforata, oblongo-ovata, ventricosa;

subtiliter transversim striata, striis subflexuosis, interruptis, juxta suturas conspicuis; anfractibus sex, convexis, superne marginatis, ultimo plano-convexo, oblique producto; apertura obliqua, oblongo-ovata, plica columellari valida: colore castaneo, albido et fusco irregulariter strigato, columella et aperturæ margine intus purpureo-rubentibus.

Shell sinistral, imperforate, oblongo-ovate, ventricose, rather solid, finely striated transversely; striæ somewhat flexuous, granulose, and interrupted, more regular and conspicuous beneath the sutures. Whorls six, convex, marginated, the last being somewhat produced obliquely and flattened on the middle, so as to give in some specimens a subangulated appearance at the base. Aperture somewhat oblique, of an oblong-ovate form; columellar fold strong. Colour chestnut-brown, striped and mottled irregularly with darker brown and white; columella and inner edge of aperture purplish red.

Hab. Island of Molokai.

The above species from the island of Molokai appears to represent the *H. marmoratus* and its varieties of the island of Maui. It is, however, larger and heavier; the last whorl has also a peculiar shape, in common with that of several of the larger species found on Molokai. All the specimens I have seen are sinistral, and the columella and edge of the aperture of a deep red.

HELICTER HUTCHINSONII.

H. testa acuminato-turrita, sinistrorsa, imperforata; anfractibus septem, plano-convexis, longitudinaliter rugosis et irregulariter striatis, non marginatis; sutura bene impressa, subrudi; apertura ovata; columella subplicata tortuosa; epidermide fictili-brunnea induta, apice fusco; apertura et columella peralbidis.

Hab. Maui, Sandwich Islands.

Shell acuminately turreted, sinistral, imperforate. Whorls seven, flatly convex, coarsely and irregularly striated longitudinally, not marginated; sutures somewhat rude, well impressed. Aperture ovate, about two-fifths the length of the shell; columellar fold slight, oblique, and tortuous. Shell covered with an earthy-brown epidermis; apex of a darker colour; aperture and columella white, shining.

This shell appears to be the analogue of *H. obscurus* (Newc.) from the island of Lanai. The latter differs in many respects, more particularly in the colour of its aperture, which is of a purplish red, and also in the shape of its columella, which has a character in common with other species found on Lanai. The above species is sinistral; *H. obscurus* is dextral. We have attached to this species the name of the Honourable F. W. Hutchinson, Judge of the Circuit Court, to whom we are indebted for several rare shells.



Pease., W Harper. 1862. "2. Descriptions of Two New Species of Helicter (Achatinella, Swains.), from the Sandwich Islands, with a History of the Genus." *Proceedings of the Zoological Society of London* 1862, 3–7.

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