ZOOPHYTA.

Cellepora Skenei, Ellis and Solander (sp.); Johnst. Brit. Zoop. p. 275. pl. 32. f. 6—8.

Among "corallines" taken in the trawl-nets in very deep water off the eastern coast of Ireland, and preserved in Miss Ball's collection, is a specimen of *C. Skenei* which was pointed out to me by that lady in May last. Dr. Johnston, in his 'British Zoophytes,' p. 276, remarks—"Notwithstanding the apparent dissimilarity in habit of the three preceding *Celleporæ* [*C. Skenei*, *C. ramulosa* and *C. pumicosa*], I cannot but suspect that they are merely different states of the same species, for in these productions the 'fronti nulla fides' receives many an apposite illustration." This specimen tends to bear out the correctness of the view that the three forms are not specifically different: the form *C. Skenei* is rare; *C. ramulosa* not common; *C. pumicosa* abundant: this last may perhaps be considered the base of both the others. With this one specimen of *C. Skenei*, a good deal of *C. ramulosa* was taken of small size adherent to *Sertularia argentea*.

Retepora cellulosa, Linn. (sp.); Johnston, Brit. Zoop. p. 297, vignette no. 46. p. 283.

Professor Allman informs me that he has in his possession a specimen of this *Retepora* attached to a *Pinna* obtained by the long-line fishermen in spring last at Cape Clear.

Iluanthos Scoticus, Forbes, Ann. Nat. Hist. vol. v. p. 183. pl. 3?

A number of specimens of an *Iluanthos* (and there is little doubt belonging to this species, though from their not having been seen in a living state a note of interrogation is added) were found by Mrs. W. J. Hancock on the beach at Balbriggan, after a storm in March 1843.

The only other specimens recorded were taken in four fathoms water at Loch Ryan, south-west of Scotland.

XLV.—*On the correct Nomenclature of the* Lastræa spinosa *and* L. multiflora *of Newman.* By CHARLES C. BABINGTON, M.A., F.L.S., F.G.S. &c.*

Lastræa spinosa.—In Newman's 'History of British Ferns' this name is adopted for the plant usually known in England as *Aspidium spinulosum* (Sw.), on account of Roth having been the first botanist who, in Mr. Newman's opinion, properly distinguished this plant from the fern known in this country by the name of *A. dilatatum,* and called by Roth *Polysticum multiflorum.* That Roth deserves the credit of very carefully distinguishing the plants will be allowed by all who read his observations upon them,

* Read before the Botanical Society of Edinburgh, 10th April, 1845.

but I am not inclined to admit that he was the first who understood them.

All the older writers who have noticed this plant refer to Weiss, Crypt., who describes it most satisfactorily as *Polypodium filix-fœmina, γ. spinosa,* but states expressly that this and three other varieties are "unius solummodo speciei notabiliores varietates." His term *spinosa* therefore, being only employed to designate a variety, has no claim of priority over one used specifically, for it certainly is not imperative, although an excellent practice, to adopt that name for a plant as a species the term by which it was known as a variety. Weiss refers to Müller's 'Flora Fridrichsdalia' for a description and figure of his plant: that description is very short but satisfactory, and the figure (which only represents one pair of pinnæ) cannot be doubted.

If now we refer to the earliest writers who have used the term *spinulosum* as applicable to a species, we find Müller employing it* in the 'Flora Danica' in the year 1777, and Retz in his 'Flora Scandinaviæ' in 1795. The figure in the 'Fl. Dan.' is far from being satisfactory, as indeed is the case with many of the plates in that work, but it, and Müller's own figure in his 'Fl. Fridrich.,' which is certainly our plant, are quoted as belonging to *Asp. spinulosum* by all the best authorities. There cannot, I think, be any doubt that Müller, when applying the name of *Polyp. spinulosum* to the plate in 'Fl. Dan.,' supposed that the artist intended to represent the unnamed plant noticed by him in his 'Fl. Fridrich.' as *Polypodium* no. 841. This settles the point as to the priority of the names, for *spinosum* was not applied to a species until used by Roth in the year 1800.

Even if Müller had been unacquainted with the plant named *Polysticum multiflorum* by Roth, we should have had quite sufficient proof that his *Polyp. spinulosum* is identical with the *Polyst. spinosum* of Roth, and also that he well understood the species; but if we turn to the 'Fl. Fridrich.' we find upon the same plate the representation of another pair of pinnæ belonging to his unnamed plant *Polyp.* no. 845, and this is a very good figure of Roth's *Polyst. multiflorum,* being indeed referred by him to that species. Müller's short description also is satisfactory. It seems then that although Roth may have been the first who "properly" (that is I presume according to modern ideas) distinguished the species, yet that thirty-three years previously Müller had separated them specifically, and described and figured them according to the modes usually adopted at that date. Müller having

* The assertion that "*spinulosum*" here is a misprint for Weiss's term "*spinosum*" is surely unfounded. Müller's name was doubtless suggested by that of Weiss, and substituted, we may well suppose, as agreeing better with the character of the plant.

afterwards given a name to one of them (but still anterior to the publication of Roth's work) ought not to have his name superseded, because the artist employed on the 'Fl. Dan.' was not of a high order of merit, or because he was careless enough to admit the bad figure engraved on tab. 707. to be a representation of his previously unnamed species, and took that opportunity of conferring a name upon it. That Müller did not confound his own plant (*Polyp.* no. 841, Fl. Fridrich.) with the *P. cristatum* (Linn.) will be seen by attending to an observation upon p. 195 of his 'Fl. Fridrich.' which is as follows: "Tria *Polypodia*, no. 841, 844, 845, nullo modo cum Linnæanis descriptionibus aut aliorum satis juste conciliare potui, hinc peritis descriptiones ac figuræ foliolorum traduntur." Of these plants no. 841. is *Polyp. spinulosum* (Müll.); no. 844. is *Athyrium ovatum* (Roth.), *A. dentatum* (Hoffm.), which seems to form part of the *A. molle* of Newman; no. 845. is *Polyst. multiflorum* (Roth). Thus it appears that Müller had endeavoured to refer his plants to a Linnæan species, but without success, and that succeeding botanists have confirmed their separation from the plants of Linnæus.

Having done my best to show that *spinulosum* is the earliest specific name belonging to *Polyst. spinosum* of Roth (who indeed quotes both the 'Fl. Fridrich.' and 'Fl. Dan.' in his 'Tent. Fl. Germ.,' but, apparently by accident, does not notice the specific name given in the latter, although he had previously quoted it in his 'Catalecta,' pt. 1.), it is not necessary to waste space upon an examination of later descriptions of plants so named, some of which describe the indusium as having a fringe of stalked glands, and therefore probably refer to the *Polyst. multiflorum* (Roth), and others expressly notice its absence. I find no reference to these glands in the original authorities for *Polyp. spinulosum*, and do not think that there is any *P. spinulosum* which possesses them, and at the same time is specifically distinct from *P. multiflorum* (Roth). I possess three continental specimens named *Asp. spinulosum*, in neither of which are there stalked glands to be found. Two of them are from Prussian Saxony, and the third is from Bitche in Lorraine. There does not seem to be the slightest reason to doubt these specimens being *Polyst. spinosum* (Roth) and *Polyp. spinulosum* (Müll.), and they tend to confirm the opinion that the true *Asp. spinulosum* of Germany is the same as our plant (*Lastræa spinosa*, Newm.), and that it has not the stalked glands on the edge of the indusium.

The synonyms seem to be as follows:—

Polypodium, no. 841, *Müll. Fl. Fridrich.* 193. *tab.* 2. *fig.* 2. (1767).

Polyp. filix-fœmina, γ. spinosa, *Weiss, Pl. Crypt. Fl. Gött.* 316. (1770).

Polyp. spinulosum, *Müll. Fl. Dan.* 707. (text and probably figure,)

(1777). *Retz, Fl. Scand. ed.* 2. 250. (1795). *Wither. Bot. Arr. ed.* 3. iii. 778. (1796). *Wahl. Fl. Upsal.* 345. (1820).
Polyp. multiflorum, β. spinosum, *Roth, Catalecta Bot.* i. 135. (1797).
Polysticum spinosum, *Roth, Tent. Fl. Germ.* iii. 91. (1800). *Catal. Bot.* ii. 149. (1800).
Aspidium dilatatum, β. spinulosum, *Wahl. Fl. Lapp.* 282. (1812).
Asp. spinulosum, α. *Wahl. Fl. Suec.* ii. 675. (1826).
Nephrodium spinulosum, *Kunth, Fl. Berol.* ii. 418. (1838).
Lastræa spinosa, *Newm. in Nat. Alm. for* 1844; *Hist. of Brit. Ferns,* 209. (1844).

Lastræa multiflora.—As to the supposed priority of Roth's name (*Polysticum multiflorum*), it may be remarked that Roth having continued to employ his own specific name, given in the 'Catalecta,' is no proof that he "claims for it priority," as he seems in other cases to prefer his own names to those previously used by Hoffmann without assigning any reason. In the present case he takes no further notice of Hoffmann's name (*Polyp. dilatatum*) than by quoting it as a synonym of his own *Polyst. multiflorum.* Roth's 'Catalecta Botanica,' part 1, appeared in the year 1797, whilst vol. ii. of Hoffmann's 'Deutschlands Flora' (which I have not seen) was published in "1795." It appears therefore that the claim of priority is in favour of *dilatatum,* which Roth (Tent. Fl. Germ.) gives as an undoubted synonym of his *multiflorum,* and also quotes Müller's figure in the 'Fl. Fridrich.,' to which I have already referred. There does not seem to be sufficient reason for any doubt being thrown upon the identity of Hoffmann's *Polyp. dilatatum* with Roth's *Polyst. multiflorum*; and if they are identical, Roth's admirable description is surely not a sufficient reason for adopting a name which has not been used by any botanist (as far as my observation extends) except its author and Mr. Newman, and rejecting one of prior date, and at least as good, which has been correctly employed by many authors.

In the first part of his 'Catalecta' Roth did not distinguish this plant from the preceding, but included them both under the name of *Polypodium multiflorum.* In the second part he separated them, employing the name of *multiflorum* for the *var.* α, and *spinosum* for the *var.* β. of the former part. The 'Catalecta,' part 2, was printed after vol. iii. of the 'Tentamen Fl. Germ.,' which is quoted in it, and we must refer to the 'Tentamen' for the separation of the synonyms of the respective species, which are mixed together in the 'Catalecta,' part 1, but carefully referred to the species to which they belong in the 'Tentamen.'

It is unnecessary to go further into an examination of the synonymy of this species, as the whole question turns upon the above points.

In conclusion, it may be as well to add, for form's sake, that I now adopt the old names of *spinulosum* and *dilatatum* for these species, from conviction that they have the claim of priority.

St. John's Coll., Cambridge, March 1845.

XLVI.—*Characters of six new species of Nepalese Birds.* By Brian H. Hodgson, Esq., late British Resident at Nepal.

Parus jouchistos.—Back and wing-coverts gray, slightly tinged with olive; cheeks, breast, abdomen and tail-coverts rufous; top of the head shining black; a line from the base of culmen extending over the crown of the head to the nape rufous white; throat gray; quills and tail blackish brown, margined with gray, and the two outer tail-feathers with white.

Length $4\frac{1}{4}$ inches; bill from gape 4 lines; wings $2\frac{1}{4}$ inches; tarsi 9 lines.

Parus seriophrys.—Yellowish olive; coverts of wings, quills and tail-feathers blackish brown, the former with pale tips, the two latter margined with greenish yellow; under surface yellowish white; a spot of bright yellow over each eye.

Length 4 inches; bill from gape 4 lines; wings $2\frac{1}{2}$ inches; tarsi 8 lines.

Parus dichrous.—Cinereous; forehead, cheeks, and throat brownish white; breast and abdomen pale rufous; quills and tail-feathers brown, margined with cinereous.

Length $4\frac{1}{2}$ inches; bill from gape 5 lines; wings $2\frac{3}{4}$ inches; tarsi 9 lines.

Oreocincla rostrata.—Upper surface uniform ochraceous brown; beneath ochraceous white, the fore part of neck spotted with black, the feathers of the breast and abdomen margined with black; a line from the nostrils through each eye white; under tail-coverts white with dusky edges on the outer sides.

Length 11 inches; bill from gape $1\frac{1}{4}$ inch; wings $5\frac{1}{4}$ inches; tarsi $1\frac{1}{4}$ inch.

Ianthocincla (*Trochalopteron*) *subunicolor.*—Olivaceous, tinged with rufous on the lower part of the back, some of the feathers of the upper part of the back margined with black; quills black, basal part of outer webs bright yellow, the other part gray; tail with middle feathers olivaceous brown, the outer feathers black, tipped with white.

Length $8\frac{1}{4}$ inches; bill from gape 9 lines.

Leiothrix (*Proparus*) *chrysotis.*—Cinereous, tinged with olive on the uropygium; forehead blackish cinereous; throat silvery gray; breast and abdomen yellow; wing-coverts and quills black, the latter margined internally with white, and exteriorly with