The Inland Mollusca of Somersetshire.

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THE varied surface, the great prevalence of the limestone formations, and the southern position of Somersetshire, must be considered the causes of its great productiveness in molluscan life. The dense woods that clothe the hills; the deep clefts in their sides forming rocky chasms, deep ravines, and damp mossy coombes; and the rich intersecting valleys, form productive breeding places for the land species: while the sluggish waters of the weedy rhines, and the more rapid current of the wider streams, afford throughout the extensive moors an abundant supply of food, and secure breeding places for the water species.

We are only aware of two lists of Somersetshire mollusca as yet published. The first of these is *A List of the Freshwater and Land Shells occurring in the environs of Bristol, with observations*, by J. S. Miller, Esq., A.L.S., published in the year 1822, in the third volume of the new series of the *Annals of Philosophy*. This list contained sixty species, from which number three, viz., Planorbis nautileus, Turbo

Everetti, and Valvata minuta, must be deducted, since two are varieties, and the last the young, of other species. The second list was read before the Somersetshire Archæological and Natural History Society, at Weston, in 1851, by the Rev. W. R. Crotch, in a paper *On the Recent Plants and Shells of the Weston district.* It embraced forty species.

One hundred and six species are included in the present catalogue. Deducting five as perhaps erroneously recorded, the remaining number of Somersetshire mollusca will be found to exceed those hitherto met with in any county or district. Mr. Alder's *Catalogue of the Mollusca of Northumberland and Durham* includes ninety-three inland species; and our own *Notes on the Oxfordshire Shells*, published in the *Zoologist* of 1853 and 1857, ninety-five species. We are not aware of any other catalogues which exceed eighty species.

It is not only, however, the number of forms, but also the great productiveness of the individuals, which makes the profusion of molluscan life in Somersetshire so remarkable. Perhaps three or four species may yet be added from the eastern and south-western districts of the county.

The nomenclature adopted (with one or two exceptions) in this catalogue, is that of Forbes and Hanley's *British Mollusca.* The synonyms added are the names that were employed in Miller's *Catalogue of British Shells.*

We have adopted Clifton into this list for the convenience of naturalists resident in Bristol. Pupa minutissima however is the only shell which takes its position here from a Gloucestershire and not a Somersetshire locality.

A few remarks on the characteristic species of the several kinds of habitat may prove interesting. Of the land mollusca, *Gardens and Hedgebanks* afford Arion hortensis, Limax agrestis, cinereus, and Sowerbii, Testacella Maugei,

Helix aspersa, nemoralis, hortensis, arbustorum, Cantiana (hedgebanks only) hispida, and rufescens. *Woods* produce Arion empiricorum (coloured varieties), Limax arborum, Vitrina pellucida, Helix fusca, Zonites (all), Bulimus Lackhamensis, Clausilia laminata. Among *moss and decaying leaves*, especially those of the beech, are to be found Arion flavus (?), Helix fulva and aculeata, Zonites (all), Azeca tridens, Balæa fragilis, Carychium minimum, Acme fusca, and several of the Pupæ. *Dry hills and the sand-hills of the coast* abound with Helix virgata, caperata, and ericetorum, and Bulimus acutus; the last confined to the sand hills. Among *Limestone rocks, heaps of stones, and walls* there are found Helix lapicida, pulchella, umbilicata, and rotundata, Pupa secale, umbilicata, pygmæa, &c., Bulimus obscurus, Clausilia nigricans, and Cyclostoma elegans. *The roots of short grass* give us Pupa muscorum, pygmæa, &c., Achatina acicula, and Helix pygmæa; and lastly, in *wet marshy spots*, may be found Arion empiricorum var. ater, Limax brunneus, Zonites nitidus, Succinea putris and Pfeifferi.

Of the freshwater mollusca *running streams and larger rhines* contain Unio tumidus and pictorum, Anodonta cygnea, Pisidium amnicum, pulchellum, Henslowianum, and cinereum, Dreissena polymorpha, Neritina fluviatilis, Valvata piscinalis and cristata, Bithinia ventricosa, Limneus auricularius, Ancylus fluviatilis and oblongus, and Planorbis albus. The *rhines* produce in great abundance Pisidium pusillum, Cyclas cornea, Paludina vivipara (rare), Bithinia tentaculata, Physa fontinalis, Planorbis corneus, carinatus, marginatus, vortex, spirorbis, and contortus, Limnæus pereger, stagnalis, truncatulus, and palustris. *Ponds* shelter in their still waters many of the rhine species, and in addition Cyclas calyculata, Pisidium obtusale and nitidum, Physa hypnorum, Planorbis imbricatus, glaber,

and nitidus. Conovulus denticulatus, var. myosotis, is confined to the Avon below Bristol; and Rissoa subumbilicata and ventrosa are only to be met with in the salt marshes.

The waters of the Bristol channel have their saltness so much diluted by the influx of rivers, and so strongly impregnated with mud, that but few marine mollusca would desire to take up their abode in them. If ever a catalogue of the marine species is prepared it must be after the investigation of the lower part of the channel. In the more northern portion we have only met with about fifteen species on the shore, and there is nothing to induce a naturalist to incur the expence of dredging.

It only remains that we should thank those gentlemen who have given us assistance in the preparation of this paper, and to express a hope that any naturalist who may be able to contribute materials towards a future supplement, should such be ever needed, will kindly communicate with us.

Class ACEPHALA.

Div. LAMELLIBRANCHIATA.

Fam. CYCLADIDÆ.

Genus Cyclas. Bruguière.

C. cornea, Linnæus. Tellina cornea, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 59. Abundant. The var. β of Jenyns' monograph (Tellina stagnicola of Sheppard) is to be met with in the rhines of the valley between Portishead and Clevedon.

C. calyculata, Draparnaud. Tellina lacustris, Mat. and

Rack., Trans. Lin. Soc., vol. viii., p. 60. The typical calyculata is common in a pond on Clevedon hill, not far from the Royal Hotel.

Genus Pisidium. Pfeiffer.

P. obtusale, Pfeiffer. In a ditch near the Pill, Clevedon, and also in the pond with the last. The more swollen forms of P. pusillum are constantly mistaken for this species. The Clevedon shells have been examined by Mr. Jenyns.

P. pusillum, Turton. Tellina pusilla, Dillwyn's Cat. of Recent Shells. Common in grassy ditches, ponds, and rhines. We have taken it of very large size in the moor that stretches from Clevedon towards Portishead.

P. cinereum, Alder. A few specimens taken in Kenn Moor are considered by Mr. Alder to belong to the more ventricose variety of this species. Mr. Clark has met with it at Bath.

P. nitidum, Jenyns. In a large pond by the side of the railway, at the third (?) bridge from Clevedon.

P. pulchellum, Jenyns. In the larger and clearer of the rhines, not uncommon. Fine in West Mead Rhine, Yatton.

P. Henslowianum, Sheppard. A specimen or two in the "river," at Clevedon. This and the last must be united, as has already been suggested by Messrs. Jenyns and Jeffreys. We have met with specimens in company, some with the "lamelliform projection" well developed, some with scarcely perceptible traces of it, and some again with the umbones presenting no irregularity. These specimens agreed in all other respects.

P. amnicum, Müller. Tellina amnica, Mat. and Rack., Trans. Lin. Soc., vol. viii., p. 60. In rivers and streams, widely distributed throughout the county.

Fam. UNIONIDÆ.

Genus UNIO. Retzius.

U. pictorum, Linnæus. Mya pictorum, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 38. "The Kennet and Avon."—Forbes and Hanley. We have never seen specimens, but are informed by Mr. Russell, of the Bath Literary Institute, that the species is very common in the Avon.

U. tumidus, Retzius. "The Unio of the river Avon and of the Kennet and Avon Canal is the typical U. tumidus with its black skin, and the flatter varieties rayed with yellow and green. Twenty years ago, after a flood, I met with it about two miles from Bath, cast in large quantities on a river-side meadow; but I have seen none since."—Mr. Wm. Clark, in litt. "The Avon and the Kennet."—Forbes and Hanley.

Genus ANODONTA. Brugière.

A. cygnea, Linnæus. Mytilus anatina, Mat. and Rack., Trans. Lin. Soc., vol. viii. Common. The variety Avonensis (Mytilis Avonensis, Mont. Test. Brit., p. 172) was found, we believe, in the Salisbury and Hampshire Avon, not the Bath and Bristol river.

Fam. MYTILIDÆ.

Genus DREISSENA. Van Beneden.

D. polymorpha, Pallas. The late Mr. Hugh Strickland, in a paper, published in Loudon's Mag. Nat. Hist., new series, vol. ii. (1838), p. 361, on the "Naturalisation of Dreissena in England," states that "this shell has lately been 'planted' by Mr. Stutchbury, of Bristol, in some waters near that place." So prolific a species once planted is hardly likely to have become extinct.

Class GASTEROPODA.

Div. PROSOBRANCHIATA.

Fam. NERITIDÆ.

Genus NERITINA. Lamarck.

N. fluviatilis, Linnæus. Nerita fluviatilis, Mat. and Rack., Trans. Lin. Soc., vol. viii., p. 225. "In pools near the Avon."—Miller. "Bridgwater and Weston-super-Mare."—Rev. W. R. Crotch.

Fam. PALUDINIDÆ.

Genus PALUDINA. Lamarck.

P. Listeri, Forbes and Hanley. The Rev. W. R. Crotch and the Curator of the Bristol Museum inform us that they have taken this species near Weston-super-Mare. The latter met with it, we believe, near the railway station.

Genus BITHINIA. Gray.

B. tentaculata, Linnæus. Helix tentaculata, Mat. and Rack., Trans. Lin. Soc., vol. viii., p. 220. Abundant.

B. Leachii, Sheppard. In the larger and clearer streams. Abundant and fine in West Mead Rhine, Yatton.—A. M. N. Weston-super-Mare.—Rev. W. R. Crotch.

Genus VALVATA. Müller.

V. piscinalis, Müller. Turbo fontinalis, Mat. and Rack., Trans. Lin. Soc., vol. viii., p. 168. Common in similar localities to the last.

V. cristata, Müller. Turbo cristatus, Mat. and Rack., Trans. Lin. Soc., vol viii., p. 169. Valvata minuta, Draparnaud (the young?). Very local. A few specimens from a ditch in Kenn Moor; also near Wells.—A. M. N.

Bath.—Mr. Clark. Weston-super-Mare and Taunton.—Rev. W. R. Crotch.

Fam. LILLORINIDÆ.

Genus Rissoa. Frèmenville.

R. ventrosa, Montagu. In marvellous abundance in a ditch near the Pill, Clevedon, the water of which is but very slightly impregnated with salt.

R. subumbilicata, Montagu. Rissoa ulvæ, var., Forbes and Hanley, vol. viii., p. 142. This species (?) [vide Jeffreys in Ann. and Mag. Nat. Hist., third series, vol. viii., (1859) p. 180] is very abundant on the mud flats, and at river-mouths all along the coast of Somerset.

We have not met with the true Rissoa ulvæ in the county. These two species of the genus Rissoa, belonging to the Hydrobia section, have been admitted into this catalogue because they hold a doubtful position between the artificially divided Fluviatile and Marine mollusca.

Div. PULMONIFERA.

Fam. LIMACIDÆ.

Genus Arion. Férussac.

A. empiricorum, Férussac. On the low grounds and in damp situations this Arion is always black; in drier situations, hills, and woods, it varies greatly in colour.

A. flavus, Müller. We have taken an Arion, which we believe to have been this species, among the ruins of Walton old church, and likewise in Brockley Coombe.

A. hortensis, Férussac. Common in gardens, on hedge-banks, and in fields.

Genus LIMAX. Linnæus.

L. cinereus, Müller. The striped and spotted varieties common. We met with a variety in Cleeve Coombe remarkably distinct, and we believe hitherto unrecorded. It was altogether pitchy black, without spot or marking of any kind, and fully six inches long. The var. *a* of Baron Férussac, in the *Histoire Naturelle des Mollusques Terrestres et Fluviatiles*, comes nearest to it. That variety is described as "Ater, carinâ albâ."

L. arborum, Bouchard Chantereux. On trees and rocks in Goblin, Cleeve, and Brockley Coombes, and some of the glens running up into the Mendips near Wells.

L. agrestis, Müller. Abundant everywhere.

L. flavus, Linnæus. Bristol and Bath.—Capt. Brown.

L. brunneus, Draparnaud. Among heaps of stones by the side of the lane which runs parallel with the cliff from Walton to Portishead; and among decaying vegetation by the side of a rhine in Portishead Moor. A remarkable peculiarity in this slug, noticed by Dr. Johnson but omitted by Forbes and Hanley, at once distinguishes the species from all the varieties of agrestis, as well as our other British species. This peculiarity consists in the great length of the neck, or space between the tentacles and the anterior margin of the shield. Another good characteristic of this species is the unusually narrow foot.

L. Sowerbii, Férussac. At Clevedon in gardens, and in the copse between Upper Clevedon and the beach.—A. M. N. Clifton.—Mr. W. Webster.

Fam. TESTACELLIDÆ.

Genus TESTACELLA. Cuvier.

T. Maugei, Férussac. Forty-six years ago this most interesting mollusk was found in what were then Messrs.

Sweet and Miller's, but which are now Messrs. Garraway and May's, nursery grounds at Clifton. From that time to the present it has thriven and propagated freely in its original locality, and has likewise been introduced with plants into many other gardens in the west of England. In this way it has established itself at Bath, at Brislington, at Clevedon (in the gardens of Sir Arthur Elton, and those of Lee), and at Taunton; and thus may be considered to have made good its claim for admission into our list of British mollusca.

T. haliotoidea, Draparnaud, has been recorded as occurring in several localities in the west of England. In all instances in which we have had opportunity of examining the specimens, the species has proved to be T. Maugei. The Testacella also which was figured and described as T. scutulum in *The Naturalist*, vol. viii., (1853) p. 179, as found at Taunton, is evidently not the T. scutulum, but T. Maugei.

Fam. HELICIDÆ.

Genus VITRINA. Draparnaud.

V. pellucida, Müller. Widely distributed but not abundant.

Genus ZONITES. Gray.

Z. cellarius, Müller. Helix nitens, Mat. and Rack., Trans. Lin. Soc., vol. viii., p. 198. Common among damp heaps of stones and moss in woods. Very fine in Brockley Coombe.

Z. alliaria, Miller. First described in Miller's *List of the Freshwater and Land Shells occurring in the environs of Bristol*. Common in woods, on hedge-banks, and under stones.

Z. nitidulus, Draparnaud. In similar situations to the last, and like it very common among decaying beech leaves.

Z. purus, Alder. Local. Among rotting leaves at the foot of Elton Hill, Clevedon, at Wrington, near Wells, and in Brockley Coombe.

Z. radiatulus, Alder. At roots of stunted grass growing in the crevices of limestone rocks on Elton Hill, and in similar situations on the eastern scarp of Clevedon Hill.—A. M. N. Clifton.—Mr. W. Webster.

Z. nitidus, Müller. Damp situations. Under stones on the grass in Kenn and Portishead Moors; rare.—A. M. N. Weston-super-Mare.—Rev. W. R. Crotch.

Z. crystallinus, Müller. Helix crystallina, Müller, Hist. Verm., pt. 2, p. 23. Frequent and widely distributed among decaying leaves, and under stones lying upon grass.

Genus Helix. Linnæus.

H. aspersa, Müller. Only too abundant. We have taken a reversed specimen at Clevedon; and also examples upon the cliffs towards Ladies' Bay which have the spire produced, so that the shell assumes the form of Paludina vivipara, Linn.

H. pomatia, Linnæus. Rare at Stapleton.—Miller. Probably introduced, and now apparently extinct.

H. arbustorum, Linnæus. Frequent, though local. We have taken it in the lane leading from Clevedon to Clapton; under heaps of stones on Strawberry Hill, Clevedon; upon the banks of the canal at Bath; among nettles at Cheddar Cliffs; and hedge-banks near Axbridge.

H. Cantiana, Montagu. Brislington is the only locality in Somersetshire in which we know this shell to occur. It was first taken there by Mr. Miller.

H. nemoralis, Linnæus. Common, but not so varied in painting as it is found in many other parts of England. We have met with a very rare variety at Wells, which is orange with five paler yellow bands, and has the lip and throat peach-coloured.

H. hortensis, Müller. This species is undoubtedly distinct from the last, which although occasionally found with the lip peach-coloured, or even white (Scarborough), can never be confounded with the smaller and more delicate shell of Helix hortensis, which moreover *never has the calcareous* (and usually coloured) *deposit of the columella*, which is so marked a character in H. nemoralis. H. hortensis is abundant in Somersetshire.

Var. *hybrida*, Poviet. Abundant and variously coloured, at Wells. The typical bandless form at Wrington, on Clevedon Hill, at Kenn, and on hedgebanks at Tickenham.

H. virgata, Da Costa. Very abundant, especially on dry hills and the sea-coast. It is very varied in colouring on the sand hills. Near Burnham one variety is found wholly deep chocolate brown; another brown with a narrow white band running round the base of the whorls, and more or less lineated round the umbilicus; a third resembles the last, but has in addition to the basal white fillet, a row of white spots round the upper margin of the whorls; a fourth is white, with one, two, or three interrupted spiral bands. Intermediate specimens, as well as the more common varieties, are also to be found. On the sand-hills at Berrow these varieties are replaced by a fifth which is milk white, with the exception of the mouth and apex, which are rufous. In Tickenham churchyard the milk-white variety with transparent bands is to be found. We have taken a reversed specimen on the sea wall near Clevedon. Mr. Miller curiously remarks, "The

abundance of this species in a field at Torkington a few months ago occasioned the report that it had rained snails."

H. caperata, Montagu. Common on dry hills and a calcareous soil, throughout the county.

H. ericetorum, Müller. Somewhat local. Abundant on the sides of the trenches at Cadbury Camp, and of the Mendips near Wells. Also on Durdham Down, Wrington Hill, and other localities.

H. lapicida, Linnæus. Common, but confined apparently to the limestone rocks. Near Wells; Cheddar, Wrington, Clevedon, and Elton Hills; Cadbury Hill, Yatton; Cleeve Toot; St. Vincent's Rocks; Axbridge, &c.

H. rufescens, Pennant. Common. Varies according to habitat. Those among brambles and in hedges are mostly large and horn-coloured; while specimens from drier situations are smaller, deeper in colour, and more elevated in the spire.

Var. *albida*, Gray, is found in profusion among a heap of stones lying by an old lime-kiln near Clevedon.

H. hispida, Linnæus. Abundant in gardens and hedge-banks, and among heaps of stones and nettles, varying in colour from white to deep chocolate brown.

Var. *concinna*, Jeffreys. In gardens at Yatton and Clevedon, in Walton old churchyard, and at Wrington.—A. M. N. Clifton.—Mr. W. Webster.

Var. *depilata*, Alder. Rare on Cadbury Hill, Yatton, and Ebbor Rocks, near Wells.

H. sericea, Draparnaud. We have met with two or three worn examples among the rejectamenta of the River Avon, below the Hotwells.

H. aculeata, Müller. We have taken this species under the bark of a fallen tree in Brockley Coombe;

and Mr. Clark informs us that he has met with it on Beachen Cliff, and in the woods of Claverton Down, near Bath.

H. fulva, Müller. Rare. Small under stones lying among grass on Elton Hill, Clevedon, and among rushes in Walton Moor. Fine in decaying leaves at Brockley Coombe, and near Wells.

H. fusca, Montagu. Helix subrufescens, Miller, Ann. Phil., vol. viii., (1822) p. 376. Described under the name of Helix subrufescens by Mr. Miller, who had taken specimens near Bristol.

H. pulchella, Müller. Helix paludosa, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 193. More common, on the limestone, under stones, in crevices of rocks, and at roots of grass.

Var. *costata*, Müller. Abundant and fine among the decaying mortar of a limestone wall near Tickenham.—A. M. N. Clifton.—Mr. W. Webster.

H. rotundata, Müller. Helix radiata, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 199. Common. Sometimes the spire is much raised, and the whorls even partially separated. We have met with greenish-white transparent specimens at Clevedon, and received the same variety from Mr. Webster, who had taken it at Clifton.

H. umbilicata, Montagu. Common in the crevices of limestone rocks on Clevedon and Elton Hills; Cleeve Toot; St. Vincent's Rocks; Wrington Hill; Cheddar Cliffs, &c.; and often exceedingly abundant among the rotten mortar of old walls, as behind the Royal Hotel at Clevedon, and in many spots on the Mendips.

H. pygmæa, Draparnaud. Not common. At roots of grass on Clevedon and Elton Hills.

Genus Bulimus. Scopoli.

B. acutus, Müller. Abundant on the sand-hills along the coast between Burnham and Weston.

B. Lackhamensis, Montagu. Helix Lackhamensis, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 212. This fine species has been taken in the neighbourhood of Bristol.—Messrs. Miller and Jeffreys. On Beachen Cliff, half-a-mile from Bath; and again in the woods of Claverton Down, two miles from Bath.—Mr. W. Clark. In a little wood by the canal, between Bradford and Freshfield.—Mr. Lukis. Among burnt gorse bushes near the bottom of a ravine to the left hand of the cliffs at Cheddar, and about a mile and a half from the village.—Rev. W. H. Hawker. Among ivy, on the hedgebank of the road leading from Axbridge to Cheddar, about three-quarters of a mile from the former place.—A. M. N. Although nowhere to be met with in any numbers, Bulimus Lackhamensis is thus seen to be widely distributed throughout Somersetshire.

B. obscurus, Müller. Helix obscura, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 212. Common among stones, and in woods; more abundant on the limestone formations.

B. Goodallii, Miller. Helix Goodallii, Miller in Ann. of Philos., iii., (1822) 376. This species, described by Mr. Miller from specimens taken in pine beds at the Clifton nurseries, has continued to abound in that locality up to the present time. It cannot be regarded, however, otherwise than as exotic, since it is not found beyond the range of hothouses.

Genus Pupa. Lamarck.

P. umbilicata, Draparnaud. Turbo muscorum, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 182. Very common.

A fine produced variety occurs among the ruins of Walton Castle. We have met with the variety edentula on a wall near Tickenham. The white hyaline variety occurs at Ebbor Rocks, near Wells, but is remarkably local, and we have taken a specimen or two at Clevedon.

P. muscorum, Linnæus. Common among limestone rocks, at roots of grass, and under stones. We have met with examples in which the tooth was altogether absent.

P. secale, Draparnaud. Turbo juniperi, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 132. Abundant among limestone rocks, Clifton, Wrington, Yatton, Clevedon, Wells, Cheddar, &c.

P. edentata, Draparnaud. Has been taken by Mr. Jeffreys in the county.

P. minutissima, Hartmann. Durdham Down.—Mr. Jeffreys.

P. pygmæa, Draparnaud. Common under stones lying on grass, and at roots of grass growing in crevices of limestone rocks. We have met with the four-toothed variety (*British Mollusca*. pl. cxxx., fig. 5) at Clevedon. This is, however, very different from the Pupa alpestris of Alder, which is certainly a distinct species.

P. substriata, Jeffreys. Turbo sexdentata, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 183. Turbo sexdentata is mentioned by Miller as found at Leighdown ; but as no other Pupa of the Vertigo section is recorded, perhaps P. pygmæa was mistaken for this species.

P. antivertigo, Draparnaud. Among the rejectamenta of the River Avon.—A. M. N. At Bristol and Bath, under ash boughs that have lain long on the ground.—Mr. Jeffreys in F. and H.

P. pusilla, Müller. Rejectamenta of the Avon.—Mr. Jeffreys.

Genus Balea. Prideaux.

B. fragilis, Draparnaud. Very local. Under moss on trees in Small Coombe (?) Wood, Bath; among decaying leaves in the interstices of a dry wall on Walton Down, near Clevedon; also in Brockley Coombe, and near Wells.

Genus Clausilia. Draparnaud.

C. laminata, Montagu. Turbo laminatus, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 179. Brockley Coombe, Wrington, Ebbor, and near Clevedon. The hyaline variety occurs in the same locality as H. rufescens var. albida.—A. M. N. Leigh Woods.—Mr. W. Webster.

C. biplicata, Montagu. Stated by Miller to exist in the neighbourhood of Bristol.—Forbes and Hanley.

C. nigricans, Maton and Rackett. Turbo nigricans, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 180. Turbo Everetti, Miller, Ann. Philos., new series, vol. iii., (1822) p. 377. Very abundant, and variable. The spire consists of from nine to thirteen volutions. The small form, which is not uncommon among the rejectamenta of the Avon, and on the Mendip Hills near Axbridge, was described by Miller as a species under the name of Turbo Everetti.

Genus Zua. Leach.

Z. lubrica, Müller. Helix lubrica, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 213. Common in damp places among moss, stones, &c.

Genus Azeca. Leach.

A. tridens, Pulteney. Brockley Coombe is the only Somersetshire locality known for this shell. It should be looked for more especially on the south side among damp moss.

Genus ACHATINA. Lamarck.

A. acicula, Müller. Buccinum terrestre, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 139. Roots of grass, Clevedon Hill; Mendips, near Wells; and among rejectamenta of the River Avon.—A. M. N. Taunton.—Rev. W. R. Crotch. On Leigh and Clifton Downs.—Miller.

Genus SUCCINEA. Draparnaud.

S. putris, Linnæus. Helix succinea, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 218. Abundant. Occasionally very large in Kenn Moor.

S. Pfeifferi, Rossmässler. Perhaps distinct from the last, and a much scarcer shell. Found in ditches along the sea margin near Clevedon, and a few other places.

Fam. LIMNÆADÆ.

Genus PHYSA.

P. fontinalis, Linnæus. Bulla fontinalis, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 126. Widely distributed throughout the county, but not generally common.

P. hypnorum, Linnæus. Bulla hypnorum, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 127. Very local. Dulcot, near Wells; Yatton; ditch near the Pill, Clevedon; Weston-super-Mare. More common in the spring months, and often found in grassy ditches which are quite dried up in the summer.

Genus PLANORBIS. Müller.

P. corneus, Linnæus. Very abundant in the Moor ditches; but rare, if not altogether absent, at higher levels. It delights in peaty water.

P. albus, Müller. Helix alba, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 192. Scarce. Found in a few

rhines of Kenn Moor, and in a pond near Wells, also at Weston-super-Mare.

P. glaber, Jeffreys. "My Planorbis glaber (P. lævis of Alder) was first found at Bristol. It is the Planorbis Rossmassleri of Continental writers."—Mr. Jeffreys in litt. We have taken it fine and in great abundance in a large pond by the railway side, at the third (?) bridge from Clevedon.

P. nautileus, Linnæus. Turbo nautileus, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 169. Planorbis imbricatus, Drap., Moll. Fer. et Fluv. France, p. 44. Common in small ponds, especially during the spring months. Occasionally met with in the moor ditches.

P. carinatus, Müller. Much less common than the succeeding species, in company with which it is found.

P. marginatus, Helix planorbis, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 189. Abundant in the rhines of all the moors, and common in ponds and ditches.

P. vortex, Linnæus. Helix vortex, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 189. Very common on the whole of the western side of the county in rhines and ponds.

P. spirorbis, Linnæus. Helix spirorbis, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 191. Much less common than the last, and more local in its distribution. Extremely abundant in ditches near the mouth of the river at Wick.

P. contortus, Linnæus. Helix contortus, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 191. Very abundant in rhines, ponds, and small ditches. A large proportion of the specimens from a small pond near Walton old Church are distorted, having the whorls irregularly coiled, and often folded over each other.

P. nitidus, Müller. Helix fontana, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 193. In clear ponds among

decaying leaves. In a pond at Yatton, and another at Weston-in-Gordano.

Genus Limnæus. Draparnaud.

L. pereger, Müller. Very abundant and variable. In brackish water the mouth is often greatly expanded.

L. acutus, Jeffreys. Among rejectamenta of the river at Uphill.

L. auricularius, Linnæus. Helix auricularia, Mat. and Rack., Trans. Linn. Soc., vol. viii. p. 221. Taunton.—Rev. W. R. Crotch. In the Froom.—Miller.

L. stagnalis, Linnæus. Very abundant in rhines, ditches and ponds. We found a reversed specimen in Kenn Moor.

L. truncatalus, Müller. Helix fossaria, Mat. and Rack., Trans. Linn. Soc., vol. viii. p. 217. Common on mud at the sides of rhines, ponds and rivers.

L. glaber, Müller. Messrs. Forbes and Hanley write of this Limnæus "It occurs in several of our southern counties, especially in Wilts and Somerset." We have never succeeded in finding it, and it should probably be looked for on the eastern side of the county.

L. palustris, Linnæus. Helix palustris, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 216. Frequent and widely distributed.

Genus Ancylus. Geoffroy.

A. fluviatilis, Müller. Patella lacustris, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 232. West Mead Rhine, Yatton, and the river at Clevedon. A pure white variety in a stream of water at the foot of Dulcot Hill, near Wells.

A. oblongus, Lightfoot. Patella oblonga, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 233. Local. The Avon, near Bath.—A. M. N. In the River Froom.—Miller. Bridgwater. Rev. W. R. Crotch.

Fam. AURICULIDÆ.

Genus Conovulus. Lamarck.

C. denticulatus, Montagu. Voluta denticulata, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 130. The variety *myosotis*, Drap., of this shell is abundant in the Avon below the Hotwells.

Genus Carychium. Müller.

C. minimum, Müller. Turbo carychium, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 184. Common, especially among decaying beech leaves, Clifton, Yatton, Wrington, Brockley Coombe, Clevedon, Wells, &c.

Fam. CYCLOSTOMIDÆ.

Genus Cyclostoma. Montfort.

C. elegans, Müller. Turbo elegans, Mat. and Rack., Trans. Linn. Soc., vol. viii., p. 167. Common among limestone rocks, Clifton Bath, Yatton, Wrington, Brockley, Cheddar, Axbridge, Wells, Weston-super-Mare, Clevedon, &c.

Genus Acme. Hartmann.

A. lineata, Draparnaud. We have found this shell among the rejectamenta of the Avon below Bristol, and our friend Mr. Jeffreys has procured a reversed specimen from the same source. Mr. Cutler, who lately was a dealer in Natural History specimens at Bath, has informed us that he has procured the species in a hazel copse below Hampton Rocks.

Sedgefield, September 20, 1860.