

graphs (II, 172) as *P. rupestris* var. *umbilicata* Montagu, and mentions three British records, one being "Wall, Cranmore, 1888! G. K. Gude." Apparently all Norman's specimens are to be referred to this variety, which, however, does not find a place in the Conchological Society's list of British non-marine Mollusca.

Churchyard wall at Bratton St. Maur!

Cheddar; *W. Maddison*.

On old walls at Bath; *Miss Fairbrass*.

Weston district; *F. A. Knight*.

Limestone rocks about Worle and Clevedon!

South.

Ham Hill, Yeovil, *J. Ponsonby*.

Var. *viridescenti-alba*; *Jeffreys*.

"Found by Mr. Norman at Clevedon, also by Mr. Webster, at Clifton, near Bristol;" *G. Jeffreys*.

PYRAMIDULA ROTUNDATA, Müller (= *Helix rotundata*, Müller).

Generally distributed, one of the commonest of our molluscs, and more frequently met with than any other of the smaller *Helices* on arid greensand soil. It is said to pair occasionally with *Hyalinia alliaria*.

Var. *Turtoni*, *Fleming*.

Bath and Bristol; *Gwyn Jeffreys*.

Clevedon; *Miss L. C. Jones*.

Bath; *Mrs. Oldroyd*.

Rejectamenta of streams at Bratton St. Maur and Shepton Montague!

Var. *pyramidalis*, *Jeffreys*.

Bristol; *McMurtric*.

Var. *rufula*, *Moquin-Tandon*.

Ellescombe Wood, near Bratton St. Maur, and Milton-Clevedon, near Bruton!

Var. *alba*, *Moquin-Tandon*.

Clevedon; *Norman*.

Bratton St. Maur and Milton Clevedon!

Weston Wood!

Hatch Beauchamp. Five specimens, an undersized race.

Diam. 6mm.; *E. W. Wake-Bowell*.

Dulverton, rather common; *Hugh Watson*.

Minehead; *C. Oldham*.

Cocker Combe, Triscombe Stone; *N. G. Hadden*.

Mon. *scalariforme*.

Gribb Wood, Bratton St. Maur!

P. ruderata, Studer, a closely allied species with more produced spire and without the red-brown freckles of *P. rotundata* is known only in the fossil state in this country, but Taylor thinks "it is by no means unlikely that isolated colonies may still linger within the limits of the British Isles."

HELICIDÆ.

HELICELLA VIRGATA, *Da Costa* (= *Helix virgata*, *Da Costa*).

Generally distributed.

"Very abundant, especially on dry hills and the sea coast. It is very varied in colouring on the sandhills"; *Norman*. It occurs in a holocene deposit on Brean Down, Weston-super-Mare. This species, and *H. caperata*, secrete themselves at the roots of herbage in times of drought. After rain they come out to feed, often so quickly and in such enormous numbers as to lead to the supposition amongst ignorant people that they came down with the rain.

Var. *subaperta*, *Jeffreys*.

Bath; *Clark*.

Var. *carinata*, *Jeffreys*.

Bratton St. Maur!

Var. *lineata*, *Olivi* (= v. *submaritima*, *Jeffreys*).

Clevedon; *McMurtrie*.

Creech Hill, Bruton, and Bratton St. Maur!

Bath; *Kenneth McKean*.

Sandhills between Weston and Burnham!

Var. *leucozona*, *Taylor*.

Bristol; *Bristol Mus. Coll.*

Burnham; *Norman*.

Weston-super-Mare; *Miss F. M. Hele*.

Quarry on top of Castle Cary Hill!

Sandhills about Berrow!

Var. *maculata*, *Moquin-Tandon*.

Arable fields on Holbrooke Farm, Bratton St. Maur!

Burnham; *Norman*.

Var. *nigrescens*, *Grateloup*.

Burnham; *Norman*.

Var. *hypozone*, *Moquin-Tandon*.

Bath; *Kenneth McKean*.

Var. *subalbida*, *Poiret*.

Dr. H. Franklin Parsons sent a specimen, collected in E.

Somerset, to Mr. Taylor (*Journ. Conchology*, IV. 30).
Minehead!

Var. *albicans*, *Grateloup*.

Bath; *Mrs. Oldroyd*.

Penselwood, Minehead, Bratton St. Maur, and hills around

Bruton and Milton Clevedon!

Near Bristol; *Bristol Mus. Coll.*

Berrow, Burnham, and about Weston-super-Mare!

Var. *hyalozonata*, *Taylor*.

Tickenham Churchyard; *Norman*.

Clevedon; *Miss F. M. Hele*.

Mon. *sinistrorsum*.

Sea-wall near Clevedon; *Norman*.

HELICELLA ITALA, *Linne* (= *Helix ericetorum*, *Müller*).

Chiefly on downs and pastures in hilly districts on calcareous soils.

North.

Abundant on the sides of the trenches at Cadbury Camp, and of the Mendips near Wells. Wrington Hill, and other localities; *Norman*.

Ashley Hill; *Cundall*. Bath; *Kenneth McKean*.

Burnham and Berrow, on the sandhills!

Castle Cary, road over hill leading to Ansford; Crawlands and Holbrooke, Bratton St. Maur!

Very abundant on Creech Hill, near Bruton!

Weston district; *F. A. Knight*.

South.

Yeovil; *J. Ponsonby*.

Ham Hill, common; a few variety "*grisescens*"; *J. Ponsonby*.

Wellington; *W. Gyngell*.

Var. *instabilis*, *Ziegler*.

Near Clevedon; *Bristol Mus. Coll.*

Var. *leucozona*, *Moquin-Tandon*.

Cornfields at Holbrooke, Bratton St. Maur!

Creech Hill, near Bruton!

HELICELLA CAPERATA, Montagu (= *Helix caperata*, Montagu ; = *Helix intersecta*, Poiret).

Generally distributed in open dry situations on calcareous soils, often present in enormous numbers. It occurs in a holocene deposit on Breaun Down, Weston-super-Mare.

Var. *subscalaris*, Jeffreys. Two examples from the railway cutting near the Vicarage, Shepton Montague !
Monkton Combe ; *Kenneth McKean*.

Var. *ornata*, Picard. The very distinct markings of this variety are, according to the Rev. S. Spencer Pearce, probably of a warning or aposematic character, enabling the shells to be easily seen and consequently avoided by sheep. It is said that this form is more abundant than the indistinctly marked type on downs and pastures where sheep are fed, but I have not observed such to be the case.

Crawlands and Grovelands, Bratton St. Maur !
About Creech Hill and Milton Clevedon !
Monkton Combe ; *Kenneth McKean*.
Dunes about Weston-super-Mare !

Var. *fulva*, Moquin-Tandon.
Bratton St. Maur and Wincanton district generally !
Creech Hill, Bruton and Castle Cary !
Dulverton ; *H. Watson*.
Monkton Combe ; *Kenneth McKean*.

Var. *lutescens*, Pascal.
From a quarry on the summit of Castle Cary Hill. The colour is admirably protective, exactly resembling that of the stones amongst which it lives.
Monkton Combe ; *Kenneth McKean*.

Var. *obliterata*, Picard.
Wincanton, Castle Cary and Bruton !
Uncommon. Through an oversight given as "common" in my paper in the *Journal of Conchology*, 1899.

Var. *alba*, Picard.
Crawlands, Bratton St. Maur ! *Haslemere Mus. Coll.*
Monkton Combe ; *Kenneth McKean*.

HELICELLA BARBARA, Linné (= *Helix acuta*, Müller ; = *Bulimus acutus*, Müller).

This interesting species is, I think, strictly xerophile and exclusively confined to the sandhills bordering the coast. It is, however, recorded in Leipner's List of the L. and F. W.

Moll. of the Bristol district as having been found by Mr. T. Graham Ponton under stones on the Downs in 1863, and in Leigh Woods by Mr. Edwin C. Wheeler, but I am not aware that these records have been confirmed in recent years. It occurs in a subfossil state amongst earth from the rabbit burrows on the south side of Brean Down, Weston-super-Mare. Does it still exist there? I failed to find living specimens.

Burnham; *Bristol Mus. Coll.*

Sandhills along the coast between Burnham and Weston;
Norman.

Weston district; *F. A. Knight.*

Remarkably abundant on the sand dunes between Weston and Burnham, but exhibiting very little diversity in form and marking!

Var. *strigata*, *Menke.*

Burnham! Uncommon.

HELICELLA CANTIANA, *Montagu* (= *Helix cantiana*, *Montagu*).

Locally abundant. Gwyn Jeffreys observed that it is "not uncommon in parts of Somersetshire" (*Linn. Soc. Trans.*, 1833).

North.

"Brislington is the only locality in Somersetshire in which we know this shell to occur. It was first taken there by Mr. Miller"; *Norman.*

Ashley Hill and Leigh Woods; *Cundall.*

Avon Gorge and Dundry; *Bristol Mus. Coll.*

Bath; *Jenyns Mus. Coll.*

"In the Bristol district it was first observed between Brislington and Keynsham in 1825"; *Ralph Tate.*

South.

"Common in one extended locality at Hatch Beauchamp, near Taunton"; *E. W. Bowell.*

Near Durleigh, Bridgwater; *H. Corder.*

Var. *albida*, *Taylor.*

Bristol; *Bristol Mus. Coll.*

HYGROMIA FUSCA, *Montagu.*

Very local. It was described by Mr. J. S. Miller of Bristol in the *Annals of Philosophy* (1822), under the name of *Helix subrufescens*. He remarked that he had found it not infrequently in Somerset. Montagu was the first to recognise this species and described it in his *Testacea Britannica*, 1803.

North.

Leigh Woods, Bristol; *W. W. Stoddart.*

Gribb Wood, Bratton St. Maur; hedgebanks by roadside on the upper slopes of Milton Hill, near Bruton!

Base of Callow cliffs, above Hale Well; *F. A. Knight.*

"A large and very depressed example," Leigh Woods, Clifton; *H. Watson.*

South.

Hatch Beauchamp, near Taunton. "Local but occurring in several hedgebanks. It seems to be fond of moss as a habitat"; *Wake-Bowell.*

Near Minehead; *Adams and Oldham.*

Dulverton; *H. Watson.*

HYGROMIA GRANULATA, Alder (= *Helix sericea*, *Jeffreys*).

A rare species. According to *Jeffreys* it is "not uncommon in hedge-banks and moist woods in Somersetshire" (*Linn. Soc. Trans.*, 1833). There are specimens in the *Jenyns Collection*, Bath Museum.

North.

Ashley Marsh, Bristol; *Bristol Mus. Coll.*

"We have met with two or three worn examples among the rejectamenta of the Avon"; *Norman.*

Once in Weston Wood; *F. A. Knight.*

Mitford; *Kenneth McKean.*

South.

Plentiful when it occurs, but apparently very local. Damp spots in woods. Around Yeovil. Montacute and Pitt Wood, numerous; *J. Ponsonby.*

Wellington; *W. Gyngell.*

HYGROMIA HISPIDA, *Linné* (= *Helix concinna*, *Jeffreys*).

Generally distributed, often very abundant in damp situations. Messrs. *Kennard* and *Woodward* record it from an alluvial deposit at *Castle Cary*.

Var. *subglobosa*, *Jeffreys.*

Churchyard, Bratton St. Maur, and two specimens from rejectamenta of the stream at *Shepton Montague*!

Var. *conica*, *Jeffreys.*

Wells; *F. Townsend.* Haslemere Museum Collection.

Var. *hispidosa*, *Mousson.* This is the *Helix hispida*, *Jeffreys*, and is commonly found with the type.

Var. *depilata*, Alder.

Rare on Cadbury Hill, Matton, and Ebbor Rocks, near Wells; *Norman*.

Rejectamenta of stream near Shepton Montague!

Var. *nana*, *Jeffreys*.

Creech Hill!

Var. *subrufa*, *Moquin-Tandon*.

Rejectamenta of stream at Shepton Montague, and of the River Brue below Castle Cary!

Frequent in hedges at Bratton St. Maur!

Var. *albocincta*, *Taylor*.

Rejectamenta of stream at Shepton Montague!

Bratton St. Maur! *Haslemere Mus. Coll.*

Var. *albida*, *Jeffreys*.

Ashley Downs; *Cundall*.

Castle Cary; churchyard at Bratton St. Maur!

HYGROMIA RUFESCENS, *Pennant* (= *Helix rufescens*, *Pennant*).

Generally distributed. "Varies according to the 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" (*Norman*). Messrs. Kennard and Woodward record it from an alluvial deposit at Castle Cary.

Var. *rubens*, *Moquin-Tandon*.

Common throughout the Wincanton district!

Rimpton!

Var. *albo-cincta*, *Cockerell*.

Rejectamenta of the streams at Shepton Montague!

Dulverton; *H. Watson*.

Var. *alba*, *Moquin-Tandon*.

Near Clevedon, stones lying by an old lime kiln; *Norman*. Wincanton, Glastonbury, Bruton, Castle Cary, and Bratton St. Maur! I have often found it crawling on the leaves of *Arum maculatum*.

Leigh Woods; *Cundall*.

Dulverton; *H. Watson*.

ACANTHINULA ACULEATA, *Müller* (= *Helix aculeata*, *Müller*).

Locally abundant.

North.

On Beachen Cliff and in the woods of Claverton Down, Bath; *Clark*.

Examples in the Jenyns Collection, Bath Museum.
 Under bark of a fallen tree in Brockley Coombe; *Norman*.
 Leigh Woods; *Cundall*.
 Creech Hill, Bruton!
 Woods at Holbrooke and about Bratton St. Maur; near
 Wincanton!
 Very abundant in rejectamenta of River Brue at Castle
 Cary, and streams at Bratton St. Maur and Shepton
 Montague!
 Weston district; *F. A. Knight*.

South.

Brympton, Yeovil; *J. Ponsonby*.
 Dulverton; *H. Watson*.
 Var. *albida*, *Jeffreys*.
 Bath; *Clark*.

VALLONIA PULCHELLA, Müller (= *Helix pulchella*, Müller).

This species is probably generally distributed. Until quite recently two species were included under the name *Helix pulchella*, therefore it is advisable to omit all records given in published Lists. There are specimens in the Haslemere Museum and in the Museum at Sexey's School, Bruton, which I gathered many years ago at Bratton St. Maur, where it was very abundant under the flat stones capping old walls. Specimens from Brympton and Sutton were sent to Mr. John Taylor by Mr. Ponsonby, and Mr. Kenneth McKean collected it near Bath.

Brean Down, Weston-super-Mare!
 Plantations on the peat moors about Shapwick!

VALLONIA COSTATA, Müller (= *Helix pulchella*, var. *costata*, Müller).

Its elevation to specific rank dates from the discovery by Dr. Sterki of very fine, raised revolving lines on the nucleus of the $1\frac{1}{2}$ embryonal whorls. In *V. pulchella* these whorls are smooth. It appears to be widely distributed.

North.

Wincanton district generally. Bratton St. Maur; *Haslemere Mus. Coll. and Sexey's School, Bruton*. Rejectamenta of River Brue below Castle Cary!
 Abbot's Leigh; *Bristol Mus. Coll.*
 Near Tickenham; *Norman*.
 Coombe Down, Bath; *Mrs. Oldroyd*.

South.

Between Minehead and Watchet; *Liouel Adams and Charles Oldham.*
Yeovil district; *J. Ponsonby.*

VALLONIA EXCENTRICA, *Sterki.*

Closely allied to *V. pulchella*, differing chiefly in the excentric and somewhat elongated umbilicus. (See *British Non-Marine Mollusca*, pp. 42-43). It occurs in similar situations, and is probably equally widely distributed.

North.

There are several specimens in the Haslemere Museum Collection found amongst a large series of *Helix pulchella* collected at Bratton St. Maur in the years 1894-96.
Near Clevedon Old Church at roots of grass!
On Brean Down, Weston-super-Mare!
Plantations on the turf moors around Shapwick!

South.

Luccombe!

HELICIGONA LAPICIDA, *Lioué* (= *Helix lapicida*, *Lioué*).

Generally distributed on limestone rocks and old walls.

Var. *bruuuea.*

Ham Hill; *J. Ponsonby.*

Var. *uigresceus*, *Taylor.*

Bristol; *Bristol Mus. Coll.*

Bratton St. Maur, Wincanton and Rimpton!

Var. *albina*, *Menke.*

Specimens of this interesting variety taken from a stone wall near Wells were exhibited by the Rev. S. Spencer Pearce at the meeting of the Conch. Soc., July 7th, 1887. In a note in the *Journal of Conchology* (p. 255) of the same year Mr. Pearce stated that they occurred "on a loose ivy-coloured stone wall on the old Bristol road, just outside the city. The variety is associated in this place with individuals of a brown form. The pale brown specimens are the most frequent. It is easy indeed to arrange a complete series which will show every variation in colour from the dark-brown to the purest white. The wall on which this variety flourishes is composed of rough blocks of liassic limestone taken from a small pit close at hand."

In the fourth volume of the *Journal of Conchology*, Jan., 1883 (p. 27), Miss F. M. Hele records the discovery of a single specimen near Leigh Court, Bristol.

Mon. *scalariforme*.

A scalarid example which I found crawling on a gate-post at Rimpton in company with several normal specimens, may be seen in the Haslemere Museum Collection.

HELICIGONA ARBUSTORUM, *Linné* (= *Helix arbustorum*, *Linne*).

Locally abundant, occurring chiefly on the lower south-western slopes of the limestone hills. "Around Bristol the shells are very dark, perhaps from the red soil, for although around Bristol lias abounds, the Mountain Limestone at Clifton seems preferred. I have noticed that in chalky districts the white variety is more abundant, and the shells are generally of a thinner texture, and the animals lighter in colour than ours here at Bristol, which are almost black" (Miss F. M. Hele).

North.

"Frequent, though local. I 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 hedgebanks near Axbridge;" *Norman*.

"Foot of the cliffs called the Perch, between Shipham and Axbridge, and more abundantly in Cheddar Gorge, on the right going up"; *F. A. Knight*.

Dundry and Leigh Woods, Bristol; *Bristol Mus. Coll.*

Hedge-banks on the lower slopes of Castle Cary Hill;
W. Macmillan.

West Pennard, Pitcombe, Milton Clevedon, and several hedges on the outskirts of Bruton!

Blomefield Park, Bath; *Kenneth McKean*.

Bath; *Jenyns Mus. Coll.*

South.

Near Taunton; *E. W. Bowell*.

Dulverton; *Hugh Watson*.

Montacute; *J. Ponsonby*.

Wellington; *W. Gyngell*.

Dunster!

In two hedges about a mile apart bordering the wood near Brympton; *J. Ponsonby*.

Var. *conoidea*, *Westerlund*.

Leigh Woods, Bristol; *Bristol Mus. Coll.*

Hedgebanks at Milton Clevedon, and the lower slopes of Creech Hill towards Bruton! *Haslemere Mus. Coll.*

Var. *fuscescens*, *Duchassing* (=v. *marmorata*, *Taylor*).

Milton Hill, near Bruton, and hedgebank, near Castle Cary!

Montacute; *J. Ponsonby*.

Var. *cineta*, *Taylor* (=v. *pullida*, *Taylor*).

Near Bruton, rare; *C. D. Heginbotham*.

Milton Clevedon!

Var. *flavescens*, *Moquin-Tandon*.

Near Bristol; *Bristol Mus. Coll.*

Gant's Mill, near Bruton, a conoidal form!

Montacute; *J. Ponsonby*.

Milton Clevedon!

Var. *albina*, *Moquin-Tandon*.

Bath; *Bristol Mus. Coll.*

HELIX ASPERSA, *Müller*.

The well-known common or garden snail, always abundant in the neighbourhood of human habitations, and often a great pest in gardens. It is sold in the Bristol markets, and elsewhere, as "wall-fish," and is an esteemed article of diet by the poor of Bristol, Swindon, and other towns. There are men who make a livelihood during the winter by collecting these snails from their hibernating places. In November, 1896, I met a "wall-fish" collector at Bratton St. Maur. He was collecting for a Bristol dealer, his home, however, was in Kent, where he worked as a carpenter in summer and autumn. He had visited Somerset regularly for many winters to collect these snails. He told me that the *hibernaculum* usually faces the south-west, that the molluscs congregate in some numbers, and appear to have a predilection for certain spots. They seldom hibernate under oaks, and, though old walls are favourite retreats in summer (whence they probably owe the name of "wall-fish"), they rarely winter in them. He carried an iron rod about two feet long, slightly crooked at one end, with which he probed likely nooks and corners. He had that morning extracted a gallon and a half of these snails from a *hibernaculum* near the village, but this was an unusual occurrence; he asserted that his "takings" seldom exceeded a gallon per day.

General Pitt-Rivers, when excavating at Bokerly Dyke in 1888, found a large number of shells, including 183 of oysters and 109 of *H. aspersa*. Apparently the latter mollusc was an article of food in Romano-British times in the West of England, and the practice of eating it has lingered on to the present time. Mr. St. George Gray records that many shells were found in Wick Barrow, Stogursey, dating from the Early Bronze Age, about 1800 B.C.

Ten varieties and two monstrosities of this species are enumerated in the Conchological Society's List of British non-marine Mollusca: all of them have been found in Somerset. Concerning colour variation, Miss F. M. Hele, a well-known Bristol conchologist, informed Mr. J. W. Taylor that the form prevalent near Bristol is "dark-coloured;" at Weston-super-Mare it is brown with black markings; near Bath very pale and much mottled; at Cheddar the shells are very solid and large; but at Clevedon no special peculiarity has been noticed (*Journ. Conch.* IV, 93). I have seen very fine specimens in the Wincanton district; many years ago I obtained a very large and dark-coloured one from a hedge at Bratton St. Maur, it was quite as large and nearly as solid as an adult *H. pomatia*. Mr. St. George Gray found a very large one in Wick Barrow. There are specimens in the British Museum, labelled var. *major*, from Blagdon and Weston-super-Mare. Very small and thin forms are not infrequently met with; these must not be confused with immature shells; they usually occur near the sea, but I have taken examples at Bratton St. Maur.

A most interesting fact in connection with this species is its ability to bore into limestone. Whilst examining the Carboniferous Limestone cliffs on the south side of Brean Down in June, 1910, I found cavities in the face of the rock (Plate III) which were obviously retreats of *H. aspersa*. After an examination of a number of them I concluded that these molluscs were responsible for their formation. In many the aperture was circular and large enough to admit the shell easily. In the majority the cavity was about two inches deep and contained a single individual, but in some the tunnel was five or six inches long and was occupied by two or three. My attention was first directed to them by observing a large heap of excrement at the base of a vertical rock in which the hole was about eighteen inches above the ground. The homing instinct of these snails is well known, and in all probability each animal has its own particular *hibernaculum*. The discovery of these burrows on Brean Down is of some interest in that they are



ROCK-SHELTERS OF *HELIX ASPERSA* IN
CARBONIFEROUS LIMESTONE ON BREAN DOWN,
WESTON-SUPER-MARE.

The rock was situated in an exposed position and is greatly weathered. In sheltered situations the apertures of the *hybernacula* are usually circular.

From a photograph by George Hutchinson, Sidcot School.

by no means common in England. Taylor records (*Monograph*, III, p. 246), that perforated rock dwellings are found in many places in Ireland, at Great Orme's Head and Tenby in Wales, at Miller's Dale, Derbyshire, at Whelpington, Northumberland, "and probably at other places." He observes (I, p. 312) that "the ability of the *Helices*, in course of ages to excavate these tunnels, can scarcely be questioned, as, in addition to their demonstrated power to abrade limestone and chalk with their odontophores, M. Bouchard-Chautereux has affirmed from actual experiment that their mucoid secretions exhibited a distinctly acid reaction, testified by the reddening of litmus paper, and would, therefore, tend to dissolve the rock, and thus facilitate the process of the excavation. Probably, however, the movements of the snails within the cavities have been a chief cause of their excavation, the wearing power of the friction of the foot being clearly demonstrated by the worn margins of the cavities, and by the sunken tracks leading thereto, worn away in the rocks by the passage to and fro of the countless generations of snails which have for untold ages sought their shelter."

Var. *conoidea*, *Picard*.

General in hedges; *Cundall*.

Bratton St. Maur! Uncommon.

Var. *globosa*, *Moquin-Tandon*.

One example from a hedge near Pitcombe Rectory!

Var. *tenuior*, *Shuttleworth*.

Bratton St. Maur! A rare form usually occurring near the sea.

Burnham!

Var. *nigrescens*, *Moquin-Tandon* (Plate IV, 1).

Occasionally with the type in hedgebanks.

Bratton St. Maur and Rimpleton!

Miss F. M. Hele found a specimen at Burnham, which was "literally as black as ink."

Var. *undulata*, *Moquin-Tandon*.

Holbrooke, near Wincanton!

Weston-super-Mare; *J. Madison*.

Bristol; *Miss Hele*. Figured in Taylor's *Monograph*, III, Pl. XXIII.

Var. *flammea*, *Picard*.

Not uncommon in the Wincanton district!

Var. *albo-fusciata*, *Jeffreys*.

Near Bristol; *Bristol Mus. Coll.*

Fairly common about Jack White's Gibbet, Bratton St. Maur!

Sub-var. *puncticulata*.

With an indistinct and narrow yellow peripheral band (Plate IV, 5).

Bratton St. Maur!

Var. *zouata*, *Moquin-Tandon*.

Cheddar; *Miss F. M. Hele*.

Bratton St. Maur!

Berrow!

Var. *unicolor*, *Moquia-Tandoa*.

"An unicolorous specimen (not *exalbida*, *Meuke*) from Hatch Beauchamp, near Taunton; *Rev. E. W. Wake-Bowell*.

Bath; *Miss Fairbrass*.

Freshford, rare; *Miss F. M. Hele*.

Sub-var. *grisea*.

Leigh Woods; *Miss F. M. Hele*.

Coombe Down, Bath; *Mrs. Oldroyd*.

Near Porlock; *L. E. Adams*.

Yeovil; *W. Gyagell*.

Var. *exalbida*, *Meuke* (Plate IV, 4).

Locally abundant. *Miss F. M. Hele* informed *Mr. Taylor* that she had "easily bred *H. aspersa*, but variety *exalbida* degenerates into a shell covered with a dirty brownish-yellow epidermis, instead of the exquisitely delicate lemon hue found on them in their wild state; I have thought that feeding them on lettuce may produce this change of colouring, as the more lettuce I gave mine, the darker and dingier the epidermis became" (*Journa. Couch.*, IV, 100). *Taylor* remarks that "in the neighbourhood of nettles and ivy at Leigh Woods, Clifton, where it was discovered by *Miss Hele*, as many as twenty have been taken in a single evening, but the chief locality is now destroyed, being covered by a flourishing street of shops" (*Journa. Couch.*, 1883).

Common, Leigh Woods, 1878; *Miss F. M. Hele*.

Cuckoo Hill, near Bruton, very local but abundant; *C. D. Hagiubotham*.

The cross roads at Bratton St. Maur, known as "Jack White's Gibbet"! At this spot I once secured between 50 and 60 fine specimens in one evening.

Cannington, near Bridgwater.



THE GARDEN SNAIL.
 (*Helix aspersa*, Müller).

1, Variety *nigrescens*, Moquin-Tandon, penultimate whorl slightly abraded; 2, 3, monstrosity *scalariforme*, Férussac; 4, var. *exalbida*, Menke; 5, subvar. *puncticulata*, Baudon; 6, var. *zonata*, Moquin-Tandon, shewing aperture covered with the winter epiphragm.

The scalarid examples were taken at Cole, the others at Bratton St. Maur.



Mon. *sinistrorsum*.

Clevedon ; *Norman*.

Bristol and Bath ; *Miss F. M. Hele*.

Miss Hele found three specimens on separate occasions in Paddy's Lane, Bristol.

Mon. *scalariforme*.

"I have found near Bristol two shells approaching the ram's horn variety shewn at the British Museum ; *Miss F. M. Hele*.

This form is exceedingly rare, it is the mon. *cornucopia*, *Gmelin*, of our text books. Mrs. Oldroyd took a specimen at Bath.

"A very fine example found at Taunton is almost like mon. *cornucopia* ; *W. Gyngell*.

Two typical scalarid specimens (see Plate IV, 2, 3) were obtained by Mr. William Macmillan from a "wall-fish" collector near Cole Station. He generously presented them to the Haslemere Museum ; also the subscalarid example mentioned below. These occupy an intermediate position between the extreme scalarity of *cornucopia* and the form at one time known as mon. *subscalariforme*, *Williams*. Of the latter we have the following Somerset record : "Examples upon the cliffs towards Ladies' Bay, Clevedon, have the spire produced so that the shell assumes the form of *Paludina viviparus* ;" *Norman*. A single specimen was found by Mr. William Macmillan in the "creel" of a wall-fish collector near Castle Cary.

HELIX NEMORALIS, *Linné*.

Generally distributed. Remarkably abundant, and showing great diversity in size, coloration, and banding, on the sand-hills by the coast about Burnham, where I have found some very large forms, also dwarfed ones. Large forms (var. *Major*, *Férussac*) have also been recorded from Cheddar Cliffs (*J. Madison*) and Weston-super-Mare ! Mr. H. St. George Gray found it commonly in the excavation of Wick Barrow, Stogursey, in 1907.

Var. *conica*, *Pascal*.

A fine example from Abbot's Hill, Bratton St. Maur !

Near Locking ; *J. Madison*.

Var. *compressa*, *Terver*.

Hedge at the bottom of Bratton Hill, Bratton St. Maur !

Var. *roseolabiata*, Kobelt.

"We have met with a rare variety at Wells, which is orange, with five pale yellow bands, and has the lip and throat peach-coloured"; *Norman*.

A specimen taken by Miss Hele at Blagdon is figured in Plate 1, vol. i, of J. W. Taylor's *Mouograph*.

Bratton St. Maur!

Bitton, Bath; *Miss F. M. Hele*.

Var. *bimarginata*, *Moquin-Tandon*.

One example from Abbot's Hill, Bratton St. Maur!

Var. *rubella*, *Moquin-Tandon*.

A common form.

Bath; *Mrs. Oldroyd*.

Weston-super-Mare and Berrow!

On the sand dunes at Burnham, amongst gorse on hillsides at Bratton St. Maur, and in hedges bordering Milton Hill, near Bruton!

Dulverton; *H. Watson*.

Taunton; *W. Gyugell*.

Triscombe Stone and Buncombe; *N. G. Hadden*.

Sub-var. *cornea*.

Burnham; Milton Hill, near Bruton!

Minehead; *L. E. Adams*.

Var. *libellula*, *Risso*.

A common form.

Bristol; *Bristol Mus. Coll.*

Weston-super-Mare.

Burnham sandhills; woods and gorse-clad hillsides at Bratton St. Maur!

Milton Clevedon and around Bruton; *C. D. Hegiabotham*.

Dulverton; *H. Watson*.

Var. *fascialba*, *Picard*.

Shell with pale and opaque peripheral band, usually on a darker but more translucent ground tint. Concerning this form Mr. Taylor writes in his *Mouograph* (III, p. 312): "This variety is one of the most interesting and suggestive of the whole range this species offers, and has been hitherto named as distributed as var. *leucozona*, but Picard's name takes precedence; it is evidently an atavic form and must be classified with the similar palæogenic forms exhibited by *Helix cantiana*, *H. hispida*, *H. rufescens*, and other species. This former scheme of colouring may be readily recognised even when

complicated with the presence of the more modern scheme of fasciation, as the space between the upper and lower group of bands of the ancient band arrangement is not coincident with that separating the modern banding, but invariably occupies a higher position on the whorl, so that the modern dark peripheral or third band is developed almost in the centre of the formerly existent peripheral space, which is thus really supra-peripheral and clearly indicates a former approximation in band arrangement to that which now characterizes the somewhat more primitive yet sub-dominant South-European genus *Campylœa*."

Bitton, near Bath; *Miss F. M. Hele*.
Rimpton!

Var. *castanea*, *Picard*.

A frequent form.

Bristol; *Bristol Mus. Coll.*

Bath; *Mrs. Oldroyd*.

Milton Clevedon and around Bruton; *C. D. Heginbotham*.
Bratton St. Maur, abundant amongst gorse on hillsides;
W. Herridge.

Frequent on the sandhills at Burnham and Berrow!

Hatch Beauchamp; *E. W. Wake-Bowell*.

Taunton; *W. Gyngell*.

The fawn-coloured sub-var. *petiveria* occurs at Weston-super-Mare, on the higher slopes of Milton Hill, and on gorse-clad hillsides at Bratton St. Maur!

Var. *olivacea*, *Risso*.

Blagdon; *Miss F. M. Hele*.

Milton Clevedon; Bratton St. Maur and Burnham!

Shapwick! Taunton; *E. W. Wake-Bowell*.

Baltonsborough; *S. C. Clapham*.

Var. *studeria*, *Moquin-Tandon*.

Shell lilac-colour. "This variety is really a very uncommon shell, and though somewhat frequently found of a lilac colour, the shells are generally denuded specimens of certain forms of vars. *rubella* or *castanea*, which have a purplish ground beneath the epidermis" (*Taylor, Mon.*, III, p. 306).

Minehead, July, 1900; *Guy Breeden*.

Var. *hyalozonata*, *Taylor*.

Burnham, rare!

Var. *lateritia*, Dumont and Mortillet.

Cheddar; F. H. Sykes.

Sub-var. *roseozonata*.

Blagdon; Miss F. M. Hele.

Var. *citrinozonata*, Cockerell.

Abbot's Hill, Bratton St. Maur, very rare!

Var. *undulata*, Gentiluomo.

Blagdon; Miss F. M. Hele. Figured in Taylor's *Monograph*, III, 312.

Milton Clevedon; and Grovelands, Bratton St. Maur!

HELIX HORTENSIS, Müller.

Generally distributed. Perhaps more abundant in roadside hedges than elsewhere, especially in the vicinity of villages. Like *H. nemoralis*, it exhibits remarkable diversity in colour and banding. Extreme forms alone are recognised as varieties in the Conchological Society's list. A collector may easily obtain on the limestone in Somerset a series of specimens shewing every gradation of colour between two colour forms, such as var. *albina* and var. *lilacina*. Some of the intermediate forms present a piebald appearance and may be considered as hybrids, for example, the var. *lutea* is sometimes blotched with faint lilac spots (var. *lutea-hirida*, Williams). I have taken large forms (var. *major*, Moquin-Tandon) at Bratton St. Maur; dwarf forms (var. *minor*, Moquin-Tandon) have been taken by Miss Fairbrass at Bath, Miss Hele at Blagdon, Mr. C. D. Heginbotham in the neighbourhood of Bruton, and by the writer about Bratton St. Maur.

Messrs. Kennard and Woodward record *H. hortensis* from a holocene deposit of great antiquity at Castle Cary.

Var. *roseolabiata*, Taylor.

Frequent in East Somerset, in the district between the three towns, Wincanton, Bruton, and Castle Cary!

Rimpton! About Berrow and Burnham!

Blagdon, and Bitton, near Bath; Miss F. M. Hele.

Var. *fuscolabris*, Kreglinger (= *fuscolabiata*, Von Martens). Frequent in the neighbourhood of Wincanton, Bruton, and Castle Cary!

Rimpton!

Dulverton; H. Watson.

Yeovil; Kenneth McKean.

Var. *violacea-labiata*, Taylor.

Blagdon; R. Miller Christy.

Var. *ludoviciana*, *Moquin-Tandon*; sub-var. *tenuis*.
Bratton St. Maur!

Var. *alba*, *Picard* (= *albina*, *Moquin-Tandon*).
Bristol; *Bristol Mus. Coll.*

Bratton St. Maur, Milton Clevedon Hill, and Rimpton!
Bitton, near Bath, common in hedgerows; Cheddar and
Portishead; *Miss Hele*.

Var. *lutea*, *Picard*.

A common form throughout the country.

Mr. W. Gyngell found B.F. 00300 at Wellington.

Sub-var. *lutescens*. Blagdon, and Bitton, near Bath;
Miss Hele.

Sub-var. *lutea-lurida*. Hedgebanks at Holbrook, near
Wincanton; hill-tops at Milton Clevedon and Pensel-
wood!

Var. *incarnata*, *Moquin-Tandon*.

Wincanton district, frequent!

Penselwood! Rimpton!

Castle Cary; *W. Gyngell*.

Near Minehead; *Lionel E. Adams*.

Blagdon; *J. Kidson Taylor*.

Bitton, near Bath; *Miss F. M. Hele*.

Var. *olivacea*, *Taylor*.

Bruton, hill towards Cole!

Rimpton!

Berrow!

Var. *baudonia*, *Moquin-Tandon*.

Cheddar (123) (45); *J. Kidson Taylor*.

Bratton St. Maur, 12345!

Var. *lilacina*, *Taylor*.

Bath; *Mrs. Oldroyd*.

Bristol; *Bristol Mus. Coll.*

Hedges at Holbrook, Bratton St. Maur!

Rimpton!

Hatch Beauchamp; *Wake-Bowcell*.

Dulverton; *Hugh Watson*.

Sub-var. *pallida*. Bratton St. Maur, and Cuckoo Hill,
near Bruton!

Var. *roseozonata*, *Cockerell*.

Amongst gorse bushes on Abbot's Hill, Bratton St. Maur!

The bands were reddish pink.

Rimpton!

Var. *rufozonata*, Cockerell.
 Bridgwater; *W. Vinson*.
 Bruton; *C. D. Heginbotham*.

Var. *arenicola*, Macgillivray.
 Frequent in the Wincanton, Bruton and Castle Cary
 districts!
 Rimpton!
 Blagdon; *Miss Hele*.
 Portishead; *Miss Wilmot*.
 Flax Bourton; *Rev. W. L. W. Eyre*.

Var. *trochoidea*, Clessin.
 Sub-var. *conica*. Bratton St. Maur!

Mon. *sinistrorsum*.

Recorded by J. W. Taylor as "Found by Miss F. M. Hele at Coombe Dingle, near Bristol, and by Miss Jessie Hele at Keynsham, N. Somerset. Both were of an uniform yellow colour" (*Journ. Conch.*, 1883, p. 35). Sporadic sinistrorsity is of very rare occurrence. Mr. John Taylor remarks (*Monograph*, I, p. 108) that "a sinistral race of *Helix nemoralis*, almost analogous to that formerly existent of *Fusus antiquus*, would appear to have at one time lived in county Donegal, as the very numerous subfossil shells picked out of the immense sandhills about Bundoran abundantly testify." Sinistral shells from this locality may be seen in many museums.

Notes on the shell banding in H. nemoralis and H. hortensis.

There is great variability in the banding of these species. Herr Georg von Martens, many years ago, devised a very convenient method of recording the variation in the number of bands, which is now almost universally adopted.

Normally five bands are present, these are indicated by the formula 1, 2, 3, 4, 5; 1 being the uppermost, 5 the lowest band, that nearest to the umbilicus. If a band is missing a cypher, 0, takes its place; thus, 00300 indicates that the third or peripheral band alone is present. Bandless forms are indicated by five cyphers, 00000.

Coalesced bands are enclosed in parenthesis, thus 123(45) indicates that the fourth and fifth bands are fused. Bandless forms predominate in both species. It is curious that the form 00300 so common observed in *H. nemoralis* is of very rare occurrence in *H. hortensis*; forms with complete absence of the

peripheral band are, as a rule, uncommon in both species. Rarely six or more bands occur. There are eighty-nine possible variations when the bands are not in excess of five.

HELIX NEMORALIS.

The commonest representatives of the *five-banded* group (16 forms in all) are 12345, (123)(45) and (12)3(45). Somewhat rare or more local forms are (12345), 1(23)(45), (12)345, (123)45, and 123(45). I have observed all of the above in Somerset. It is noteworthy that 12(34)5 has been recorded only from Germany, Belgium, and Virginia, U.S.A.

The *four-banded* group (28 forms) contains a large proportion of rare formulæ; there are only three that may be considered at all common, *viz.*, 10345, 12045, and 02345, all occur in Somerset. The rare (1234)0, (12)340, (123)40, (12)(34)0, (12)305, and 12(34)0 are recorded only from Germany, the remaining forms have occurred in Britain, but I am not aware that any of them have been observed in this county.

The *three-banded* group (25 forms) contains four that are recorded from Germany only, *viz.*, (123)00, (12)040, (12)005, and 02(34)0. These rare continental forms should be carefully searched for by Somerset conchologists. The most abundant representative of the group in this country is 00345. I have seen it in many places. Two forms, 100(45) and 0(234)0, are said to be peculiar to Britain (I have taken the latter at Milton Clevedon), the remaining seventeen are very rare.

The *two-banded* group (14 forms) comprises chiefly rare forms. The more commonly observed are 000(45), 10300, 00304 and 00340. I have taken all of these in the Milton Clevedon district. The formula (12)000 is known only from Germany, and 02040 only from Britain. The remainder are all rare.

The *one-banded* group contains only five forms, *viz.*, 10000, 02000, 00300, 00040, 00005; of these 00300 alone is common, 00040 and 00005 are uncommon in Britain, and 10000 and 02000 are rare. I have observed 00300 commonly in this county, and 00005 only once, at Burnham.

The *bandless* form, 00000, is very common in Britain and on the Continent.

HELIX HORTENSIS.

Of the *five-banded* group, the most frequent forms in Somerset are 12345, (123)(45) and (12)3(45). Forms with coalesced second and third bands are uncommon, and coalesced third

and fourth bands are rarely seen. The form (12345), var. *coalita* of some authors, is locally frequent in the county, especially on the oolite hills.

The *four-banded* group comprises many rare forms, especially rare are those without the fifth band, indeed of the eight formulæ in which it is missing, only one, 12340, is at present known to science. The most frequent forms are 10345 and 12045, which are common in many parts of the county. I have taken 02345 at Bratton St. Maur and other places. According to Taylor 0(2345), (12)305 and 1(23)05 are reported from Germany and have not been met with in Britain; one half of the twenty-eight formulæ belonging to this group are as yet quite unknown, and many of the recorded fourteen are very rare.

In the *three-banded* group, ten of the twenty-five formulæ are as yet quite unknown, and several others are very rare. The most frequent form seems to be 10045; I have taken it at Bratton St. Maur and Milton Clevedon. I have also obtained 003(45) and 100(45) at the former place. Taylor observes concerning the formulæ 003(45) that it "is found in Germany and France, but is reported only from this country by Mr. C. D. Heginbotham and Mr. Swanton," and adds that "100(45) is quite scarce, being reported only by Mr. J. F. Musham and Mr. Swanton."

The majority of the recorded forms of the *two-banded* group are rare, and four of the fourteen formulæ are as yet unrecorded or unknown. The forms more usually met with are 00045 and 10005; both have been found in hedge-banks about Bratton St. Maur and Milton Clevedon. The only representative of this group which still remains to be recorded for Britain is 0(23)00.

The five forms of the *one-banded* group are all rare. The most frequently observed is 00300; I have taken it at Bratton St. Maur, Milton Clevedon and Rimpton. The very rare 10000 occurred once at Bratton St. Maur. I observed an immature specimen (second British record) of 02000 on a wall at Kewstoke in 1910. I have taken two immature examples of 00040 and three adult 00005 at Bratton St. Maur.

The *bandless* form, 00000, is very common; yellow forms being by far the most abundant throughout the country.

The unicolorous type of coloration is more frequent in *H. hortensis* than in *H. nemoralis*.

ENIDÆ.

ENA MONTANA, *Draparnaud* (= *Buliminus montanus*, *Draparnaud*).

Local. Chiefly occurring in the Mendips, and the districts round Bath and Bristol. "Though nowhere to be met with in any numbers, *Bulimus lachhamensis* is widely distributed throughout Somersetshire"; *Norman*.

North.

Neighbourhood of Bristol; *Miller*.

Beachen Cliff and woods on Claverton Down, Bath; *Clark*. There are examples in the Jenyns Coll., Bath Museum.

"Among burnt gorse bushes near the bottom of a ravine to the left of the cliffs at Cheddar, and about a mile-and-a-half from the village"; *W. H. Hawker*.

There are two very light-brown specimens from Cheddar, in the Townsend Collection, Haslemere Museum.

"Hedgebank on road between Axbridge and Cheddar, three-quarters of a mile from the former"; *Norman*.

"Abundant at the base of Callow Cliffs above Hale Well, and above Winterhead. I have also found a few at Churchhill Batch"; *F. A. Knight*.

Hedges bordering the road above the Inn at Milton Clevedon, frequenting the decaying fronds of *Scolopendrium vulgare* in summer! The late Mr. William Macmillan brought this station to my notice. He found two or three specimens late one autumn in the hollow dried stalks of various umbelliferous plants that he was examining for pupæ.

ENA OBSCURA, *Müller* (= *Buliminus obscurus*, *Müller*.)

Generally distributed throughout the county, usually abundant in beech woods.

Var. *albina*, *Moquin-Tandon*.

Abbott's Leigh; *Bristol Mus. Coll.*

Bristol; *Rimmer*.

Combe Down, Bath; *Mrs. Oldroyd*.

STENOGRYRIDÆ.

COCHLICOPA LUBRICA, *Müller* (= *Zua lubrica*, *Müller*.)

Generally distributed. Messrs. Kennard and Woodward record it from an alluvial deposit at Castle Cary.

Var. *lubricoides*, *Férussac*.

Bath; *Clark*.

Var. *hyalina*, *Jeffreys*.

Creech Hill, near Bruton!

AZECA TRIDENS, *Pulteney* (= *Cochlicopa tridens*, *Pulteney*).

Very rare. *Jeffreys* wrote of it in 1833, "For my specimens I am indebted to the kindness of Mrs. Smith, who collected several of them alive about eight or ten years ago on some loose fragments of rock in Brockley Coombe, near Bristol." Twenty-seven years later *Norman* observed that "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."

Mr. Francis A. *Knight*, in a recent letter to me, remarked that it "probably occurs in Weston Wood, as two specimens were found among a number of *lubrica* from that locality."

Var. *crystallina*, *Dupuy*.

Brockley Coombe; *Jeffreys*.

CÆCILIOIDES ACICULA, *Müller* (= *Achatina acicula Müller*.)

Locally abundant. Many specimens have been obtained from river drift in the northern part of the county. It is a strictly subterranean species, and is seldom found alive.

North.

Yatton; *Cundall*.

Leigh Woods; *W. W. Stoddart*.

Leigh Down; *Miller*.

"Roots of grass, Clevedon Hill; Mendips, near Wells; and among *rejectamenta* of the river Avon"; *Norman*.

Rejectamenta of the Cale above Wincanton; of a rivulet at Bratton St. Maur; and of the Brue below Castle Cary;—in large numbers! Shepton Montague and Wincanton!

Weston and Winscombe, and in great numbers in the Brue drift; *F. A. Knight*.

Jenyns Collection, Bath Museum.

Abundant in the shaft of many of the human bones found in Wick Barrow, Stogursey; *H. St. George Gray*.

South.

Taunton; *W. R. Crotch*.

Hatch Beauchamp, Taunton, one specimen only; *Wake-Bowell*.

Yeovil; *J. Ponsonby*.

Luccombe!

VERTIGINIDÆ.

JAMINIA SECALE, *Draparnaud* (= *Pupa secale*, *Draparnaud*).

A local species, apparently confined to the northern half of the county, where, as Jeffreys observed (*Trans. Linn. Soc.*, 1883), it occurs plentifully in the crevices of limestone rocks in some parts.

Coombe Down, Bath; *Mrs. Oldroyd*.

Bath; *Jenyns Mus. Coll.*

Weston district; *F. A. Knight*.

Leigh Woods, Bristol; *Cundall*.

Abundant amongst limestone rocks, Wrington, Yatton,

Clevedon, Wells, Cheddar, etc.; *Norman*.

Wells; *Townsend, Haslemere Mus. Coll.*

Cheddar; *Carleton Greene, Jouru. Conch.* VI, p. 386.

JAMINIA ANGLICA, *Férussac* (= *Pupa ringeus*, *Jeffreys*).

Very rare.

Near Bristol; *Capt. Thomas Brown*, in "Illustrations," 1844, p. 40.

"Among the Sandhills between Brean and Berrow; *W. Robinson* and *F. A. Knight*.

JAMINIA CYLINDRACEA, *Da Costa* (= *Pupa umbilicata* *Draparnaud*).

Generally distributed. Sometimes remarkably abundant amongst the roots of grass growing on the tops of old walls.

Var. *edentula*, *Moquin-Tandon*.

Near Tickenham; *Norman*.

Bratton St. Maur. Rare!

Var. *gracilis*, *Issel*.

"A fine produced variety occurs among the ruins of Walton Castle"; *Norman*.

Var. *curta*, *Westerlund*.

Rejectamenta of the Cale at Burton's Mill, near Wincanton!

Shepton Montague!

Var. *albina*, *Moquin-Tandon*.

Near Clevedon; *Bristol Mus. Coll.*

Ebbor Rocks, near Wells, and Clevedon; *Norman*.

JAMINIA MUSCORUM, *Linné* (= *Pupa marginata*, *Draparnaud*).

A fairly common species, but not so widely distributed as the preceding.

North.

"Common amongst limestone rocks, at roots of grass, and under stones"; *Norman*.

Leigh Woods, Bristol; *Bristol Mus. Coll.*

Coombe Down, Bath; *Mrs. Oldroyd*.

Bath; *Jenyns Coll., Bath Museum*.

Rejectamenta of the Brue, below Castle Cary, and of the stream below the Rectory at Shepton Montague!

Weston district; *F. A. Knight*.

Sand dunes about Berrow and Burnham!

South.

Ilchester, and Ham Hill, Yeovil; *J. Ponsonby*.

Var. *bigranata*, *Rossmüssler*.

Weston-super-Mare; *Norman*.

Bath; *Clark*.

Var. *edentula*, *Clessin*.

With type; *Norman*.

Var. *albina*, *Menke*.

Recorded by Clark, Jeffreys and Norman for Somerset, without locality.

VERTIGO MINUTISSIMA, *Hartmann*.

The smallest of our native inland shells. Its distribution, as at present known in Britain, is remarkably discontinuous; but, in all probability, its minuteness often causes it to be overlooked by conchologists. Prior to my discovery of it amongst stones on hillsides at Kewstoke, in June, 1910, it had not been observed in Somerset. In neighbouring counties it has been recorded from Durdham Down, Clifton, Gloucestershire; from East Lulworth, Weymouth, and from the east coast of Portland in Dorset.

VERTIGO ANTIVERTIGO, *Draparnaud*.

Apparently rare; but the paucity of records of many *Vertigines* must not be taken as an indication of rarity. All are minute and may be easily overlooked unless searched for with the aid of a lens.

North.

"At Bath and Bristol, under ash boughs that have lain long on the ground"; *Jeffreys*.

Rejectamenta of the Avon; *Jeffreys*, 1833.

Rejectamenta of the stream at Shepton Montague, below the Rectory, abundant!

Weston Wood!

VERTIGO PYGMÆA, *Draparnaud*.

This is probably the commonest representative of the genus, usually occurring under sticks and bark in damp situations.

North.

At roots of grass, under sticks and stones, Bratton St.

Maur; also extremely abundant in rejectamenta of the streams in the Wincanton district!

Abundant in Weston Wood and in Brue drift; *F. A.*

Knight.

Bath; *Jenyns Coll., Bath Museum*.

South.

Yeovil, near Sutton, Brympton; *J. Pousonby*.

Triscombe Stone; *N. G. Hadden*.

Var. *quadridentata*, *Studer*.

Clevedon; *Norman*.

VERTIGO PUSILLA, *Müller*.

Apparently very rare. There is only one record. Gwyn Jeffreys found it, in 1833, in rejectamenta from the Avon, near Bristol.

VERTIGO AUGUSTIOR, *Jeffreys*.

Another very rare species, found by Jeffreys in the Avon rejectamenta (see *British Conchology* I, 266). In the preliminary remarks to his list of Somerset non-marine Mollusca in the Victoria History of Somerset, B. B. Woodward remarks that this record cannot be accepted, as it "comes from a Gloucestershire locality," yet he includes it in his list! If it is to be excluded on these grounds, so must *V. pusilla*, for both were recorded by that eminent conchologist, Gwyn Jeffreys, from rejectamenta of the Bristol Avon.

CLAUSILIIDÆ.

BALEA PERVERSA, *Linné*.

Frequent in the northern half of the county.

North.

"Very local. Under moss on trees in Small Coombe Wood, Bath; among decaying leaves on Walton Downs, near Clevedon; also at Brockley Coombe and near Wells"; *Norman*.

Common on many old walls, and on moss-clad apple trees, in the Wincanton district!

Rejunctamenta of the Brue, below Castle Cary!

Weston district; *F. A. Knight*.

Long Ashton; *E. C. Wheeler*.

Bath; *Jenyus Coll., Bath Museum*.

South.

Brympton, Yeovil, a few in the orchard; *J. Ponsonby*.

"Common in several orchards, under the loose pieces of bark from the apple trees, at Hatch Beauchamp, near Taunton"; *Wake-Bowell*.

Wellington; *W. Gyngell*.

CLAUSILIA LAMINATA, *Montagu*.

Widely distributed. Usually abundant in beech woods.

Var. *pellucida*, *Jeffreys*.

Stoke Bishop and Leigh Woods; *Cundall*.

"Avon Gorge, near Suspension Bridge, Somerset side";

Bristol Mus. Coll.

Var. *albina*, *Moquin-Tandon*.

Of frequent occurrence with the type.

Brockley Coombe; *Cundall*.

Leigh Woods; *Bristol Mus. Coll.*

Box Wood, Bath; *Clark*.

Coombe Down Wood, Bath; *Mrs. Oldroyd*.

Woolston, near Yarlinton!

Around an old lime-kiln, Clevedon; *Norman*.

Hatch Beauchamp, Taunton—three specimens; *Wake-Bowell*.

CLAUSILIA BIPLICATA, *Montagu*.

A very rare British species, occurring in not more than six of our southern counties. In Somerset it is apparently confined to the north-western district.

Leigh Woods; *W. W. Stoddart*, in *Leipner's* list.

(Quoted, with a query, by *Cundall*.)

"Stated by *Miller* to exist in the neighbourhood of Bristol"; *Forbes and Hanley*.

Two specimens (living) were found together in a cranny in a wooden gate post at Sidcot, in Winscombe parish, in 1865; *F. A. Knight*.

CLAUSILIA BIDENTATA, *Ström* (= *Clausilia perversa*, *Pulteney* = *Clausilia rugosa*, *Draparnaud*).

Generally distributed, and abundant in all districts.

Var. *glaciliar*, *Jeffreys*.

Leigh Woods; *Bristol Mus. Coll.*

Bratton St. Maur!

Var. *tumidula*, *Jeffreys*.

Brockley Coombe, Bristol; *Jeffreys*.

Milton Clevedon and Bratton St. Maur!

Var. *parvula*, *Turton*.

"Of this rare and elegant shell I found one specimen, which had the remains of the animal in it, among the rejectamenta of the Avon river, near Bristol"; *Gwyn Jeffreys*, in *Linn. Soc. Trans.*, 1833.

Var. *everetti*, *Miller*.

Bristol; *Miller*.

Leigh Woods; *Bristol Mus. Coll.*

Rejectamenta of Avon, and Mendip Hills, near Axbridge, not uncommon; *Norman*.

CLAUSILIA ROLPHII (*Leach in Turton*, 1831).

A very rare species. There are specimens in the Bristol Museum taken at Long Ashton. For many years this was the only known station for it in the county; but in 1906, when searching for *Ena montana* on the hills around Milton Clevedon, the writer found eight specimens near that village. They have been placed in the Haslemere Museum.

SUCCINEIDÆ.

SUCCINEA PUTRIS, *Linné*.

Abundant in the margins of the rhines on the moors.

North.

Bath; *Jenyns Coll.*, *Bath Museum*.

Occasionally very large in Kenn Moor; *Norman*.

Yatton; *Bristol Mus. Coll.*

Brislington; *T. G. Ponton*.

Long Ashton; *Wheeler*.

Common on banks of the rhines on Pennard Moor !
 Bratton St. Maur !
 Monkton Coombe ; *Kenneth McKean*.
 Weston district ; *F. A. Knight*.
 Rhines about Meare !

South.

Yeovil ; *J. Ponsonby*.
 Var. *albida*, *Mörch*.
 Pennard Moor, near Glastonbury !

SUCCINEA ELEGANS, *Risso*.

Fairly common on the borders of streams, canals and ditches.

North.

Barrow Gurney ; *Bristol Mus. Coll.*
 Weston district ; *F. A. Knight*.
 Clevedon ; *Miss L. C. Jones*.
 Margins of stones on the moors around Glastonbury,
 Shapwick, Highbridge, etc. !
 Margins of streams in the Wincanton district !

South.

Brympton and Ilchester ; *J. Ponsonby*.
 Var. *pfeifferi*, *Rossmässler*.
 "Found in ditches along the sea margin near Clevedon,
 and in a few other places" ; *Norman*.
 Maxmills (?) ; *F. A. Knight*.
 Var. *albida*, *Taylor*.
 Near Bristol ; *Bristol Mus. Coll.*
 In a quarry pool at Bratton St. Maur !

SUCCINEA OBLONGA, *Draparnaud*.

A rare species. Burnham (*Stoddart*, in *Leipner's list*, quoted as doubtful by *Cundall*). *Mr. J. W. Taylor*, in *Journ. Conch.* V, p. 84, records a single specimen, from drift collected from banks of the river Brue, near Glastonbury, by *Mr. J. Morland*.

There is no reason to doubt the presence of this species in the living state in the county of Somerset. It occurs in the dune marshes about Braunton Burrows, N. Devon ; and I am informed by *Dr. H. P. Blackmore* that it occurs at Alderbury, Wilts. (See my paper in the *Wiltshire Archaeol. & N. H. Magazine*, Vol. XXXVI, on the Mollusca of Wiltshire.)

AURICULIDÆ.

CARYCHIUM MINIMUM, Müller.

Generally distributed. Common amongst leaves and under sticks and stones in woods and hedges. Often occurring in large numbers in river drift. Mr. F. A. Knight observes¹ "The smallest British land shell, *Carychium minimum*, a species of no great rarity, but one that, on account of its extreme minuteness, is probably often overlooked, is, especially in some years, very plentiful under stones in damp places among the trees (in Weston Wood). Its size may be estimated from the fact that it took 105 specimens to cover a threepenny-piece, and that all these together weighed, when dead, exactly half-a-grain."

PHYTIA MYOSOTIS, Draparaud (= *Melampus myosotis*, Draparaud; *Alexia myosotis*, Draparaud).

An estuarine species, to be found under stones immediately above high-water mark at the mouths of rivers.

North.

In the Avon, near Bristol; Forbes and Hooley.

Banks of the Avon, near Pill; Cundall.

Abundant in the Avon, below the Hotwells; Norman.

Var. *deuticulata*, Montagu (= *Melampus deuticulatus*, Montagu)

Banks of the Avon, near Pill; Cundall.

Var. *riugeus*, Turton.

Banks of the Avon, near Pill; Cundall.

OVATELLA BIDENTATA, Montagu (= *Melampus bidentatus*, Montagu; = *Leuconia bidentata*, Montagu).

It frequents crevices of rocks, near high-water mark.

Banks of the Avon, near Pill; Cundall (with a query).

Var. *alba*, Turton.

Banks of the Avon, near Pill; Cundall (with a query).

LIMNÆIDÆ.

ANCYLUS FLUVIATILIS, Müller.

On stones in streams and rivers. Sometimes attached to the larger bivalves. Always in running water. A somewhat

1. "The Sea-Board of Mendip," p. 137.

local species. Messrs. Kennard and Woodward record it from an alluvial deposit at Castle Cary.

North.

Portbury ; *Bristol Mus. Coll.*

Bath ; *Kenneth McKean.*

West Mead Rhine, Yatton ; and the river at Clevedon ;
Norman.

River Cale, below Wincanton ; *W. Herridge.*

The Stour at Gaspar, and the Shepton Montague stream,
near the bridge where the road to Bruton passes over it !

Weston district ; *F. A. Knight.*

Ashton ; *Wheeler.*

Clevedon ; *Miss L. C. Jones.*

Nailsea ; *Misses Hele.*

South.

Beer Crowcombe, near Taunton ; *Wake-Bowell.*

Between Minehead and Watchet ; *L. Adams and C.*
Oldham.

Wellington ; *W. Gyngell.*

? Var. *capuloides*, *Jan.*

"Extraordinarily large specimens occur in a stream on
the Quantocks, at Holford"; *F. A. Knight.*

Var. *albida*, *Jeffreys.*

Wookey, near Wells ; *Bristol Mus. Coll.*

"Wookey Hole, near Wells (Beavor) ; *Gwyn Jeffreys.*

Foot of Dulcot Hill, near Wells ; *Norman.*

ACROLOXUS LACUSTRIS, *Linné* (= *Velletia lacustris*, *Linné* ;
= *Ancylus lacustris*, *Linné*).

A very local species, frequenting stems and leaves of water plants in lakes, ponds, and canals ; never swiftly running streams.

North.

Ham Green ; *Cundall.*

Local. The Avon, near Bath ; *Norman.*

Bath ; *C. W. Viner.*

Worle, near Weston-super-Mare ; *Bristol Mus. Coll.*

River From ; *Miller.*

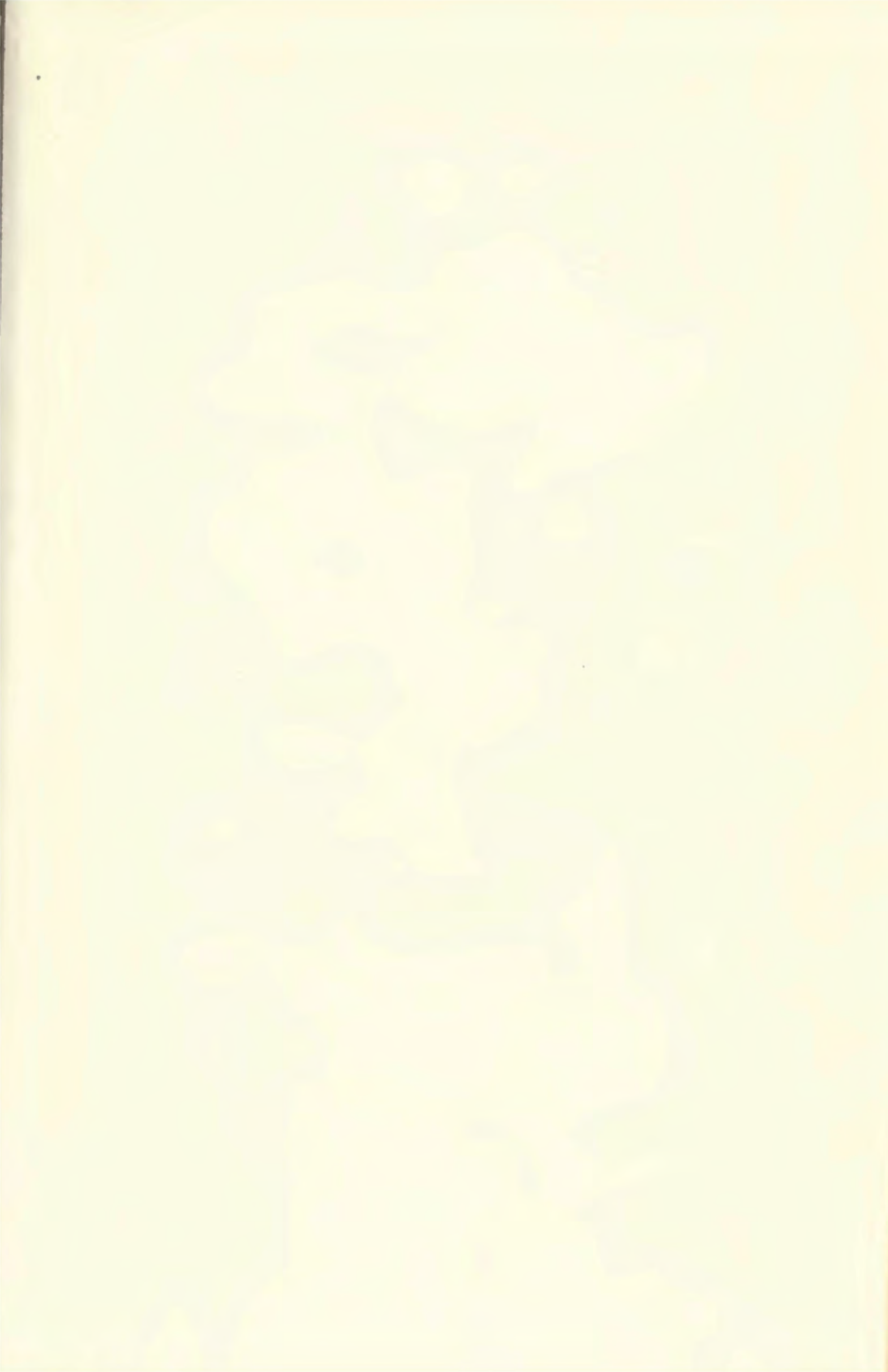
Weston district ; *F. A. Knight.*

South.

Hatch Park, Taunton ; *Wake-Bowell.*

Bridgwater ; *W. R. Crotch.*

River Tone, Taunton ; *W. Gyngell.*





POND SNAILS (Genus *Limnæa*).

1, *L. stagnalis*, Linné, central shell immature; 2, *L. peregra*, Müller; 3, 4, *L. auricularia*, Linné; 5, *L. palustris*, Müller; 6, *L. glabra*, Müller; 7, *L. truncatula*, Müller, the secondary host of the "liver fluke" of sheep.

The differences, apart from size, are slight variations in the spire and aperture, the family likeness is unmistakable. There is phylogenetic evidence that *Limnæa peregra* (by far the commonest species) is the ancestral form from which all the others have been derived.

All were taken in the neighbourhood of Berrow.

LIMNÆA AURICULARIA, *Linuë*. (Plate V, 3, 4.)

Lakes, ponds and sluggish streams. Local.

*North.*Bath Canal; *C. W. Viner*.In the Froom; *Miller*.Kennet and Avon Canal, near Bath; *H. Watson*.River at Keynsham; *Misses Hele*.Leigh Woods and Clevedon; *Cundall*.Fish-ponds at Holbrooke, near Wincanton; *W. Herridge*.River Cale, below Wincanton; *W. Galpin*.Weston district; *F. A. Knight*.Burnham; *W. Stoddart*.

Near Berrow!

*South.*Taunton; *Crotch*.Beer Crowcombe, near Taunton; *Wake-Bowell*.Old Canal, Wellington; *W. Gyugell*.Var. *acuta*, *Jeffreys* (= *Limnæus acutus*, *Jeffreys*).Among rejectamenta of the river at Uphill; *Norman*.Var. *magna*, *Colbeau*.Fish-ponds at Holbrooke, near Wincanton; *W. Herridge*.Var. *albida*, *Jeffreys*.Bath; *Clark*.LIMNÆA PEREGRINA, *Müller*. (Plate V, 2.)

Generally distributed. The commonest species of our fresh-water mollusca. Very variable in size and form.

Var. *lacustris*, *Leach*.

A rhine on Pennard Moor, near Glastonbury!

Var. *ovata*, *Draparnaud*.Yatton; *Bristol Mus. Coll.*Pond near Ashley Down; *Misses Hele*.Var. *acuminata*, *Jeffreys*.Among rejectamenta of the river at Uphill; *Norman*.Var. *vulgaris*, *C. Pfeiffer*.

Shepton Montague, in a watercress bed!

Var. *succinæformis*, *Jeffreys*.

Rhines on Pennard Moor, near Glastonbury!

Var. *lutea*, *Montagu*.

Near Shepton Montague!

Var. *labiosa*, *Jeffreys*.Fish-ponds at Holbrooke, near Wincanton; *W. Herridge*.

LIMNÆA PALUSTRIS, Müller. (Plate V, 5.)

A frequent species in marshes, margins of ponds and sluggish streams.

North.

Rhines about Glastonbury, Shapwick, Highbridge, etc. !

Weston district ; *F. A. Knight.*

Clevedon ; *Miss L. C. Jones.*

Ashton ; *Wheeler.*

Kenn Moor ; *Cundall.*

Bath Canal ; *Kenneth McKean.*

Bath ; *Jenyns Mus. Coll.*

South.

Middle Chinnock, several ; *J. Ponsonby.*

Old Canal, Wellington ; *W. Gyngell.*

Var. *elongata*. *Moquin-Tandon.*

Pennard Moor, Glastonbury !

Var. *conica*, *Jeffreys.*

Yatton ; *McMurtrie.*

Var. *roseolabiata*, *Jeffreys.*

Clevedon ; *Misses Hele.*

Yatton ; *Bristol Mus. Coll.*

LIMNÆA TRUNCATULA, Müller. (Plate V, 7.)

Generally distributed ; frequent on the banks of ditches, streams, canals and rivers. This species is of special interest in that one stage in the life history of an only too well known parasite, *Fasciola hepatica*, the cause of the dreaded liver rot or "fluke" of sheep, is spent upon it. *Fasciola hepatica* is a flat worm which, in the embryo stage, leads a free aquatic life. Passing into the body of the mollusc, it spends the sporocyst stage in the lung cavity. Next, what is known as the redia stage is passed in the viscera, chiefly the digestive gland. It then escapes from the snail and the free cercarian stage is spent upon grass, on which it encysts itself. The grass is eaten by sheep, and the mature sexual stage (*Distoma hepaticum*) is developed from the cercarian stage in the bile ducts. This snail is most abundant in marshy clay lands subject to periodic flooding. The infection of the sheep usually takes place during a wet autumn, and the disease is at its height in the succeeding winter. Three million sheep died of the "fluke" in England in the winter of 1879-80.

Var. *elegans*, *Jeffreys.*

Frequent with the type in the Wincanton district.

LIMNÆA STAGNALIS, *Linné*. (Plate V, 1).

Widely distributed in lakes, ponds, slow running streams and canals. Especially abundant in the moor rhines.

Var. *fragilis*, *Linné*.

Kennet and Avon Canal; *Cundall*.

Pennard Moor, near Glastonbury!

Var. *labiata*, *Jeffreys*.

Clevedon; *Cundall*.

Mons. *sinistrorsum*

Keen Moor, near Clevedon; *Norman*.

LIMNÆA GLABRA, *Müller*.

Very rare.

"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.'" *Norman*.

I found two bleached shells in a ditch at Bratton St. Maur in 1890. Repeated searches failed to yield any more, and I concluded they were probably dropped there by birds. I searched the extreme east of the county very carefully between the years 1890-97 for this rare shell, but without success. Neither could I find it in Wilts, and its inclusion in the mollusca fauna of that county rests upon half-a-dozen specimens in the Haslemere Museum, collected at Great Bedwyn by the late Frederick Townsend, F.L.S., in the year 1850.

Gwyn Jeffreys, in *British Conchology*, 1862, remarks that it had been found in Wilts and Dorset, but makes no mention of Somerset. J. C. Mansel-Pleydell gives, in *Mollusca of Dorsetshire*, 1898, p. 22, five stations for it.

Since writing the above, I have found this species in a ditch near Berrow. An examination of the Bratton St. Maur station shows that the shells were found in a Holocene deposit.

AMPHIPEPLEA GLUTINOSA, *Müller* (= *Limnæa glutinosa*, *Müller*).

Very rare. The only Somerset record that I can find is that given in Vol. I. (p. 102), of Gwyn Jeffreys' *British Conchology*, which reads, "in a ditch near Dunster Castle, in Somersetshire (Leach)." Jeffreys probably quoted from William Elford Leach's *Synopsis of the Mollusca of Great Britain*, London, 1852, a book I have not seen. J. C. Mansel-Pleydell

records it for Dorset (see *Mollusca of Dorsetshire*, p. 23), where he found it in Chamberlayne's river, Bere Regis.

PLANORBIS CORNEUS, Linné.

Ponds, canals and slow running streams. Locally abundant.

"Very abundant in the moor ditches; but rare, if not altogether absent, at higher levels. It delights in peaty water."
Norman.

North.

Yatton and Clevedon; *Bristol Mus. Coll.*

Common in rhines on Pennard Moor! *Haslemere Mus. Coll.*

Weston-super-Mare; *T. Hincks.*

Weston district; *F. A. Knight.*

Brislington; *Stoddart.*

Kenn Moor; *Cundall.*

Bath Canal, very large; *Kenneth McKean.*

South.

"Beer Crowcombe, Taunton, three specimens," *Wake-Bowell.*

Var. *albina*, *Moquin-Tandon.*

Clevedon and Yatton; *Bristol Mus. Coll.*

Kenn Moor; *Cundall.*

Clevedon; *Misses Hele.*

Mon. *scalariforme.*

One specimen from a rhine on Pennard Moor.

PLANORBIS ALBUS, Müller.

Locally abundant.

North.

"Scarce. Found in a few rhines on Kenn Moor, and in a pond near Wells, also at Weston-super-Mare";
Norman.

Grosvenor, Bath; *Mrs. Oldroyd.*

Bath; *Jenyns Coll., Bath Museum.*

River Stour, Gaspar!

Stream at Wincanton!

Rejectamenta of the Brue, near Castle Cary, and of streams at Bratton St. Maur and Shepton Montague!

Weston district; *F. A. Knight.*

Shell-bearing deposit at Dumball Island; *H. Bolton.*

South.

Beer Crowcombe, near Taunton, uncommon; *Wake-Bowell*.
 Ilchester, Brympton, Yeovil; *J. Ponsouby*.
 Pond at Wellington; *W. Gyngell*.

Var. *draparnaldi*, *Sheppard*.
 Bristol; *Jeffreys*.

PLANORBIS GLABER, *Jeffreys* (= *Planorbis parvus*, *Say*).

This species is not common in our southern counties. I am acquainted with but two Somerset records:—Norman remarks in his List: "We have taken it, fine and in great abundance, in a large pond by the railway side at the third (?) bridge from Clevedon."

In Bolton's paper on a shell-bearing deposit at Dumball Island its occurrence at the Avonmouth Dock is noted.

(In Wilts it is known only from some specimens in the Haslemere Museum, collected by Townsend in the neighbourhood of Great Bedwyn in 1851).

PLANORBIS CRISTA, *Liuné* (= *Planorbis nautilus*, *Liuné*).

Widely distributed, on aquatic plants in ditches and ponds. There are two forms, often occurring together and equally abundant. In one the outer whorl has strong transverse ridges, in the other the shell is smooth. Some authorities give specific rank to the smooth form (as *P. uanuleus*), and consider the ridged form as a variety (v. *crista*).

North.

Burnham; *Cundall*.

Common in the Wincanton district!

Weston district, very abundant in some rhines in early spring; *F. A. Knight*.

South.

Ilchester; *J. Ponsonby*.

Var. *lævigata*, *Adami*.

Common in the Wincanton district!
 Ilchester; *J. Ponsonby*.

PLANORBIS CARINATUS, *Müller*.

A rare species, but it is possibly often passed over for the common *P. umbilicatus* which it resembles in stature, differing chiefly in having broader whorls and in being sharply keeled in the median line. According to Leipner it is common through-

out the Bristol district. Gwyn Jeffreys, in *British Conchology*, 1, 90, remarks that it is a Somerset species. Cundall wrote, "‘‘common, (?) Kenn Moor.’’ Norman’s record reads :—“ In the moor ditches, in company with *Planorbis marginatus*, but not common.”

Weston district ; *F. A. Knight*.

Bath ; *Kenneth McKean*.

Ilchester, a few ; *J. Ponsonby*.

Wellington ; *W. Gyngell*.

PLANORBIS UMBILICATUS, Müller (= *Planorbis complanatus*, *Jeffreys*, and *Planorbis marginatus*, *Draparnaud*).

A frequent species in ponds and slow-running streams.

North.

Streams near Clevedon ; *Misses Hele*.

“ Abundant in the rhines of all the moors, and common in ponds and ditches ” ; *Norman*.

Very common in rhines about Berrow, Highbridge, Shapwick, etc. !

Ditches at Harwood, near Wineanton ; *W. Herridge*.

Weston district ; *F. A. Knight*.

Kenn Moor ; *Cundall*.

Shell-bearing deposit at Dumball Island ; *H. Bolton*.

South.

Middle Chinnoek and Ilchester ; *J. Ponsonby*.

Wellington ; *W. Gyngell*.

Var. *rhombea*, *Turton*.

Middle Chinnoek ; *J. Ponsonby*.

PLANORBIS VORTEX, *Linné*.

Frequent in ponds and slow running streams.

North.

Yatton ; *Bristol Mus. Coll.*

Jenyns coll. ; *Bath Museum*.

“ Very common on the whole of the western side of the county in rhines and ponds ; ” *Norman*.

Harwood, near Wineanton !

Very abundant in rhines about Berrow, Shapwick and Meare !

Kenn Moor ; *Cundall*.

Weston district ; *F. A. Knight*.

Streams near Clevedon; *Leipner* and others.
Bath Canal; *Kenneth McKean*.

South.

Brympton; *J. Ponsonby*.
Wellington; *W. Gyngell*.

PLANORBIS SPIRORBIS, *Linné*.

Common in ponds and slow-running streams in the northern part of the county, and presumably in the south also. Abundant amongst duckweed (*Lemna*), in many rhines on the Levels.

South.

Tintinhull; *J. Ponsonby*.
Dulverton; *H. Watson*.

Var. *albida*, *Nelson*.

Pond by roadside, near Penselwood!

Var. *leucostoma*, *Michaud*.

Middle Chinnoek, Vauxhall and Brympton; *J. Ponsonby*.

PLANORBIS CONTORTUS, *Linné*.

Frequent in ponds, lakes and ditches.

North.

Kenn Moor; *Cundall*.

Ashton; *E. C. Wheeler*.

Clevedon; *Leipner*.

Wineanton and Bruton districts!

Weston district; *F. A. Knight*.

Amongst *Lemna* and other floating weeds in rhines about Shapwick, Meare, etc.!

South.

Middle Chinnoek; *J. Ponsonby*.

Wellington; *W. Gyngell*.

Var. *albida*, *Jeffreys*.

Weston-super-Mare; *Jeffreys*.

Yatton; *Bristol Mus. Coll.*

Middle Chinnoek; *J. Ponsonby*.

Mons., *scalariforme*.

“Specimens from a small pond near Walton Old Church are distorted, having the whorls irregularly coiled, and often folded over each other.” *Norman*.

PLANORBIS FONTANUS, *Lightfoot* (= *Planorbis nitidus*, Müller of Jeffreys).

A local species frequenting ponds and sluggish streams.

North.

In a pond at Yatton, and another at Weston-in-Gordano ;
Norman.

Grosvenor, Bath ; *Mrs. Oldroyd.*

Rejctamenta of Brue below Castle Cary, and in ponds
and ditches at Holbrooke, near Wincanton ; *W. Her-*
ridge.

Weston district ; *F. A. Knight.*

Rhines on the peat moors around Shapwick !

South.

Ponds at Hatch Park, Taunton ; *E. W. Wake-Bowell.*
Brympton, Yeovil, Ilchester ; *J. Ponsonby.*

PHYSIDÆ.

PHYSA FONTINALIS, *Linné.*

Generally distributed in ponds and slow-running streams.

Var. *albina*, *Jeffreys.*

Long Ashton ; *Bristol Mus. Coll.*

APLECTA HYPNORUM, *Linné* (= *Bullinus hypnorum*, *Linné*,
and *Physa hypnorum*, *Linné*).

A local species.

North.

"Dulcot, near Wells ; Yatton ; ditch near the Pill, Cleve-
don ; and Weston-super-Mare." *Norman.*

Weston district ; *F. A. Knight.*

Worle, near Weston-super-Mare ; *Bristol Mus. Coll.*

Long Ashton ; *Wheeler.*

A small pond at Holbrooke, near Wincanton ; *W. Her-*
ridge.

Charlton Musgrove, near Wincanton !

Ditches at Harwood, near Wincanton ; *W. Galpin.*

Bath ; *Jenyns Coll., Bath Museum.*

South.

Yeovil, Middle Chinnock ; *J. Ponsonby.*

Wellington ; *W. Gyngell.*