

SCIENCE PAPER No. 2.

*Printed and Published for the Committee of the Haslemere
Microscope and Natural History Society, September, 1903.
Price 6d., post free, from the Hon. Secs. Half-price to
Members.*

A SHORT ACCOUNT
OF THE

**Land and Fresh Water
Mollusca**

of Haslemere, Surrey,

BY

CHARLES PANNELL,

*Member of the Conchological Society of Great Britain, and
of the Malacological Society of London.*



To the seeker after the beautiful in nature, the lowly denizens of our hedgerows, ponds, and ditches will, perhaps, at first sight present but few attractions.

Our common slugs and snails, far from affording to many people that amount of pleasure that is felt on beholding some of the beautifully-marked moths and gorgeously adorned butterflies and beetles, are too often regarded as vile and repulsive—unpleasant to the eyes, and decidedly not to be handled.

Yet, in the animal kingdom, the humble molluscs hold high rank. The sub-kingdom MOLLUSCA is only second to that great group of the vertebrate animals of which man is the crowning species.

Notwithstanding that molluscs are only soft-bodied creatures, have no backbone, and are deficient in the brain power exhibited in the higher types, they have a very serviceable, and, for their simple needs, sufficient organization. That most familiar inhabitant of our gardens, the common garden snail (*H. aspersa*), is by no means the highest of molluscan types, but it has complete digestive and circulatory systems, (the pulsations of the heart may be seen in some of the Zonitidæ, etc.) It can hear and see, in a limited degree, at short range, and the sense of smell is highly developed. The nervous system is complex and highly sensitive. Locomotive capabilities are restricted, but this snail is persevering, and, in a quiet, unobtrusive way, accomplishes a great deal in the way of travel. Slugs and snails are addicted to habits, both good and bad.

Is it necessary to add that slugs and snails feed well? The staple article of diet consists of plants peculiar to their habitats. Some species, however, prefer other kinds of food—flesh, living or dead. Cannibalism is not unknown amongst them. The bindings of books and papers will do at a push, and this summer the writer observed a

young *H. aspersa* making a respectable meal off green paint, well charged with oil and turpentine, and boldly returning a short time after to the same spot for another feast. Unfortunately, it is not possible to say what happened eventually to that *Helix*.

The following species and varieties have been taken within a five-mile radius of Haslemere, and, most of them, in the immediate vicinity. In each case the habitat is stated. To assist in identifying the forms, each is briefly described and its notable features pointed out. Popular names are introduced, in addition to the scientific designations, wherever possible. Many of these popular names are to be seen in "Shell Life," written by a member of the Haslemere Society—Mr. Edward Step, F.L.S. The classification adopted is that of the Conchological Society's List of British Land and Freshwater Mollusca (1892).

A word of warning is necessary. Some of the forms—common enough elsewhere—are rare in this district, and there is considerable danger of extermination. Wholesale collecting is, therefore, discouraged, and a close observance and study of the habits of these humble but exceedingly interesting creatures is recommended as being a more worthy pursuit.



Sub-kingdom MOLLUSCA.

- Class CEPHALA (with heads).
 Sub-class GASTROPODA (belly-footed).
 Order INOPERCULATA (without opercula).
 Sub-order PULMONATA (having a lung cavity).

Family ARIONIDÆ.

Arion ater (L.)

This familiar black slug is readily recognisable by the colour of the type, the slime gland on the tail, the bulbous tentacles, the respiratory orifice being in the forepart of the mantle, and the yellowish line marked with black transverse lines around the foot. Extended, it is three to five inches long. It is supposed to live in moist ditches and similar places, but has been seen on the dry sand of Hindhead.

Certain varieties known to conchologists as **swammerdamii**, **johnstonii**, **alba**, **rufa**, and **marginata** exist locally.

A. subfuscus (DRAP.)—*The Dusky Slug*—

is a smaller slug, and distinguished by two lateral blackish bands. It has a grey foot and emits a saffron-yellow slime.

Found in damp grass at Hindhead and elsewhere. The vars. **brunnea** and **aurantiaca** occasionally occur.

A. hortensis (FER.)—*The Garden Slug*—

which is marked with grey bands, is a local form. Length one to one-and-a-half inch.

A. circumscriptus (JOHNST.) and

A. minimus (SIMROTH)

are local forms.

Family LIMACIDÆ.

Amalia sowerbyi (FER.)

and the other members of this family possess no slime gland, thus being readily distinguishable from the Arionidæ. It is also important to note that the respiratory orifice is situated nearer to the hinder margin of the mantle.

This little yellow slug has been seen in Tennyson's Lane.

Limax maximus (L.)—*The Great Slug.*

This handsome species is common in our gardens, and may be seen on warm moist nights foraging for food. It is noteworthy that these molluscs frequently return to the same hiding-place in which they rest during the light of day. Somehow, in the course of the outward and homeward journey, the slime tracks are made to cross, the result being an extremely badly written, but quite evident, figure eight. *L. maximus* is three to six inches long, and typically ashy to black in colour, and emits a glistening white slime. It is by no means a fastidious feeder, but has a strong partiality for flesh, and does not object to feasting upon its fellows. Its masticatory apparatus is alarming, including, as it does, a lingual ribbon or tongue carrying no less than 28,960 teeth.

The varieties **ferrussica** (four rows of black spots on body), **fasciata** (whitish bands), **marmorata** (mantle marbled and spotted), and **krynckii**, are common in East Street Gardens, and, with the type, may be met with generally all over the district—especially in the older gardens.

L. arborum or *marginatus* (MULL.)—*The Tree Slug*—

is not so common as the preceding species, but may be met with on trees. It is a great climber, and is reputed to suspend itself from the branches by means of exuded threads of mucus. Colour—slate-grey, spotted with yellowish white. The tail is keeled, and the foot has a white edge. It is said to feed upon lichens.

The Shottermill and Hindhead Road will occasionally yield examples.

Agriolimax agrestis (L.)—*The Grey Slug or Field Slug.*

This species is white, mottled with dark grey, sometimes yellowish in colour. The type and varieties, **punctata** and **albida**, are found everywhere, and the latter is a positive tribulation in the kitchen garden, because of its voracious appetite. Length, about $1\frac{1}{2}$ in. extended.

A laevis (MULL.)—*The Smooth Slug*.

This minute, glossy, dark-brown form must be included in our local fauna

Habitat : Pitfold Hollow (the middle hollow).

Family VITRINIDÆ.

Vitrina pellucida (MULL).

This species carries a greenish glassy shell of great transparency, and through which it is possible to view the process of circulation. The whorls are few, and the spire much depressed. The animal is small, yet too large to wholly withdraw into the shell. The genus takes a middle place between the slugs and snails, possessing many of the characteristics of both. It is common and hardy, and may be found everywhere in the neighbourhood.

Family ZONITIDÆ.

Hyalinia cellaria (MULL.)—*The Cellar Snail*.

The shell is round, flat, wide, and thin, horn-coloured above and white around the umbilicus (underneath). Animal slate coloured, rounded in front, tapering behind with a narrow foot. It is a common species and is generally found reposing in damp places under stones and logs, but has been taken by the roadside in the Haslemere Road, Grayshott, near heath and bushes on sand.

A var. **viridulans** is local.

H. nitidula (DRAP.)—*The Smooth Glass Snail*—

is smaller than the preceding species (three-eighths to three-tenths inch) and has a dull, waxy-coloured shell.

Habitat : Chase, near pond.

H. nitida (MULL.)—*The Shining Snail*—

is glossy and brownish horn colour.

Habitat : Chase.

H. radiatula (ALDER.)—*The Rayed Glass Snail*—

is a little horn-coloured shell (one-twelfth to one-eighth inch), with striations extending from whorl to whorl, giving it a radiated appearance.

H. alliaria (MILLER.)—*The Garlic Snail*.

A notable and peculiar characteristic of the animal of this species (entirely lost upon the writer) is the emission of a strong smell of garlic. Diameter, one-fifth to one-quarter inch.

H. pura (ALDER.)—*The Clear Glass Snail*—

is a whitish form. Dia. one-tenth to one-sixth inch. There is a pure white variety—**margaritacea**.

H. crystallina (MULL.)—*The Crystal Snail*—

is a small and flat glassy shell.

H. fulva (MULL.)—*The Tawny Glass Snail*—

is a dark species, of conical shape, and with a ridge around the outer whorl. There is a variety **viridula**.

All of the last five species are indigenous to Haslemere. Some are rare, and all require patience and diligence in the finding. Dark and damp places, the under-side of stones, roots of grass, etc., will usually reward a careful searcher.

Bricks and tiles that may lie about will disappoint, but old sacks and discarded articles of clothing will often prove to be a mine of wealth.

To the inexperienced conchologist the great difficulty in connection with this genus will be that of identification. Much assistance in that direction may be obtained from the table of Allied Zonites, in Mr. Adams' handbook—"The Collector's Manual of British Shells."

Family HELICIDÆ.

Helix rotundata (MULL.)—*The Rounded Snail*.

This is a small circular flattened shell (about three-sixteenth inch), reddish, marked with spots, radiating from the glossy apex. It has a wide and deep umbilicus, and a white rib in the mouth of the body whorl. The animal is spotted. The species may be readily identified. It is common all over the district—under stones and logs of wood in association with its varieties **turtonii** (extremely flat) and **pyramidalis** (more conical).

H. rupestris (DRAP.)—*The Rock Snail*—

is a much smaller species than the preceding, and at a cursory glance, may be mistaken for the young of **rotundata**. There are points of difference which, if carefully studied, will put the collector on the right track. The shell is flattened underneath, the spire is raised, and the whorls are strongly striated. The animal is dark.

It is not common in Haslemere, or perhaps, is more often overlooked.

H. aculeata (MULL.)—*The Prickly Snail*.

In the centre of each whorl of this shell are numerous spines. It is highly conical, and is small and dark brown.

It is not usually found here. The only Surrey records are Haslemere, Croydon, and Reigate. Mr. Swanton turned it up in the Punch Bowl.

H. pulchella (MULL.)—*The Beautiful Snail*—

owns a pretty white shell, which, apart from colour, may be confused with **rupestris**.

It is not common, but has been taken at Camel's Dale, and is recorded for two other places only in Surrey.

H. lapicida (L.)—*The Lapidary Snail*—

should be of special interest to collectors who are natives. The introduction of this species into Haslemere (possibly from

Godalming) is attributed to the late Mr. Henry Waring Kidd, who, forty years ago, was very partial to this corner of the county. The shell ($\frac{3}{4}$ in. diameter) is unusual in shape, being very like an unmounted double-convex lens. Colour—yellowish or greyish-horn; the animal is yellowish-brown.

When the writer first began to look about for shells (in '86), this *Helix* was fairly abundant in Lower Street, but is now scarce there. It is, however, now more generally distributed, and may be found on old walls on wet days in summer. It may be easily overlooked, as the colour is protective in character, approaching that of the damp stones of its habitat. The dark variety, **nigrescens**, is most common, and **alba** (whitish) and **minor** (smaller) occur.

H. aspersa (MULL.)—*The Common Garden Snail*—

is found in every garden. This big fellow scarcely needs describing. It is, next to *H. pomatia*, our largest British land snail and is our largest local species.

H. Aspersa vies with the Grey Slug—*A. agrestis*—in its damaging raids upon garden stuff, and people who own gardens and are not conchologists rarely encourage the establishment of a colony of these hungry Molluscs. However, when *Aspersa* appears, do not heave it against the nearest wall, that course will result in an effectual smash-up, but, unfortunately for the poor snail, means a slow and torturing death. A boiling-hot water bath will kill instantly, and is more humane.

The local varieties in colour, banding, size, and shape, offer a field for comparison and investigation.

In common, probably, with other *Helices*, *H. aspersa* is fond of home. It will sally forth at night and return in the early morning to the same hiding-place, and do this repeatedly.

H. nemoralis (L.)—*The Brown Lipped Snail*—

after a shower in summer may be seen on grassy banks and adjoining wooden fences in this neighbourhood. This is a large, clean, bright-looking shell (about $\frac{3}{4}$ in. high and nearly as much in diameter) and is subject to considerable variation in colour and

banding. The colour varieties—**rubella** (pink), **libellula** (yellow), **castanea** (brown), **albina** (whitish), **olivacea** (olive brown), **hyalozonata** (transparent bands), **lurida** (half-effaced bands) and **albolabiata** (white lipped) occur, but never in profusion, and, likewise, forms which appear to combine the points of any two varieties, forming links between. The band variation is extensive. The type has fine bands—three above the middle of the last whorl and two below—the recognised formula for this is 12345. Other formulas that may be taken are 00300 (representing the third band only), 02345, 00000 (bandless), etc. **Coalita** forms occur in which the bands are more or less fused together, including such formulas as (12345), 12(345), 123(45), etc. The animal is dark brown and dingy-looking when compared with some of the water species, which, although bearing unpretentious shells, have strikingly marked bodies.

H. hortensis (MULL.)—*The White Lipped Snail*—

closely resembles *H. nemoralis*, and used to be considered a variety of that species. The shell is smaller and not so heavy. The lip is white in the type. The remarks upon banding and colour variation in connection with *H. nemoralis* apply equally to *H. hortensis*. The local colour varieties include **roseolabiata** (rose lip), **arenicola** (transparent bands), **olivacea roseozonata** (straw colour, red brown bands), and **lutea** (yellow). A thin var. **tenuis** may be recorded. Coalescence of the bands is very general, and the ordinary band formulas (not coalesced) are 12345 and ::345. 10005 (unusual) has been seen once. *H. hortensis* is more abundant than *H. nemoralis*, but difficult to find in dry weather.

H. cantiana (MONT.)—*The Kentish Snail*—

is a common South of England snail. It is flatter than *H. hortensis* but almost as large, and yellowish horn-coloured. The animal is pale yellow. Immature specimens are extremely thin, and show the viscera through the upper sides of the whorls.

It occurs at Grayswood, Prestwick, Brook, Haslemere (bank between Railway Station and Bridge).

H. rufescens (PENN.)—*The Ruddy Snail*—

resembles *H. cantiana*, but is smaller, and is commonly associated with *H. aspersa* in gardens. The body whorl is slightly keeled, and has a white band (sometimes absent) continued around it. Colour varies from red to brown.

Var. **depressa** occurs.

H. hispidia (L) [*H. concinna* (JEFF.)]—*The Bristly Snail*.

This shell is smaller than *H. rufescens*, and is covered with fine white hairs, which easily rub off, and are sometimes wanting.

The vars. **hispidosa**, **concinna** (sometimes considered as a separate species), and **subrufa** are found on the Shottermill and Hindhead Road (near Critchmere) and elsewhere.

H. granulata (ALDER). [*H. sericea* (JEFF.)]—*The Silky Snail*—

is a thin greyish species, exceedingly delicate to handle. The variety with a keel, **carinata**, only has been taken—a single specimen—in the Almshouse Road.

H. caperata (MONT.)—*The Wrinkled Snail*—

is a striated, depressed, mottled little shell, less than quarter-of-an-inch across. The varieties **obliterata** (white, with markings), **bizonalis** (two bands above and several below), **fulva** (dark brown), **subcalaris** (conical), **major** (large), and **ornata** (one band above and several below) are local.

The species abounds in the region of the parish Church and the railway.

H. virgata (DA COSTA)—*The Banded Snail*—

is reputed to be a Haslemere species, but probably in error. The var. **ornata** of the preceding species may have been mistaken (and it is not unlikely) for *H. virgata*.

Family PUPIDÆ.

Buliminus obscurus (DRAP.)—*The Lesser Bulin*—

is not coated (as according to the hand-books) with extraneous matter for purposes of disguise, but is usually of a colour approaching that predominating in its environment. In damp grass banks, where the earth is darkly stained, the shell

assumes a dark-horn tint, and on lichen-covered old walls is greyish. The shell is tall and narrow, pupa-shaped, and swollen in the middle. Height, quarter-of-an-inch; dia. in thickest part about one-eighth-of-an-inch. The animal is pale-brown and darker below.

The local habitats are High Lane, Shepherd's Hill, and Hindhead Road.

Pupa cylindracea (DA COSTA) [P. umbilicata (DRAP.)]

represents another genus of this family, and is much smaller than *B. obscurus*—less than one-eighth-of-an-inch in height. Shining, and cylindrical in shape. The mouth is provided with a small denticle (or tooth) in the middle of the base of the last whorl, and a strong rib outside.

Habitats: East Street (wall near Farm), and Houndless Water.

Vertigo antivertigo (DRAP.)

V. substriata (JEFF.)

V. edentula (DRAP.)

The Vertigines are not unlike the Pupae, but are oval-shaped, and are smaller. In *V. antivertigo* the mouth is armed with six to eight teeth. The animal is greyish-black. The shell of *V. substriata* is strongly striated, and the mouth contains six teeth. *V. edentula* is glossy and toothless.

All three of these species live in the Punch Bowl, by the stream.

Clausilia perversa (PULT.) [*C. rugosa* (DRAP.)]—*The Two-toothed Door Snail*—

is tall, slender, and cylindrical. The whorls are covered with fine ridges.

"Within the throat (of the shell) there is a narrow twisted plate of shelly matter attached to the pillar by an elastic foot. The plate is the clausilium, which automatically closes the throat when the Mollusc withdraws inside, . . . and so acts as an operculum."

Edward Step, F.L.S., in *Shell Life*.

The animal is grey-spotted, and is easily frightened into its shell.

Common everywhere on trees and old walls.

C. biplicata (MONT.)—*The Two-lipped Door Shell*—

This clausilia is of stouter proportions than **C. perversa**. It is thickly covered with fine but distinct ribs running transversely across the whorls.

"The animal is reddish-grey, with an ashy-grey foot, speckled
"with white."

(J. W. Williams).

Habitat : Shottermill (near Critchmere).

"An immature specimen found on the Hindhead road is the first
"record for this district."

(C. Pannell, *Journal of Conchology*, April, 1902).

Any take of *C. biplicata* should be at once notified to the Conservator of the Haslemere Museum.

Family STENOgyRIDÆ.

Cochlicopa lubrica (MULL.)—*The Slippery Moss Snail*.

A shining, smooth, transparent, yellowish-brown shell, much shorter than a clausilia, and with fewer whorls. The outer lip of the aperture is thin, and is strengthened by a red internal rib. Height, quarter-of-an-inch. Animal grey or brownish-grey, spotted with white.

Habitat : Under dead leaves, stones, etc., at Shepherd's Hill, Pitfold, Great Stroatly Hollow, and elsewhere.

Caecilioides acicula (MULL.)—*The Agate Snail*.

A beautiful, glassy, colourless shell—not unlike a finely-pointed agate writing style in appearance—but very small (about three-sixteenths-of-an-inch). The animal is white, and is blind. This species will require a lot of finding as it practically lives entirely underground. The only recorded examples for Haslemere are four individuals which were taken at the exposed end of an old wall, in an East Street garden, about two feet below the surface of the soil, during excavations.

Family SUCCINEIDÆ.

Succinea elegans (Risso.)—*The Graceful Amber Snail*.

This species is amber coloured, thin, and delicate, with a high spire and deep aperture. It is elongate in shape, and may be mistaken for a water snail (*Limnæa*) at a glance. This mollusc inhabits marshy spots, and lives on the flags and sedges.

Whatman's has yielded specimens.

Family AURICULIDÆ.

Carychium minimum (MULL.)—

is another marsh-dwelling mollusc. It is a tiny white shell with a tall spire, and is addicted to feeding upon rotting logs of wood lying by and in our roadside ditches. The animal is "yellowish-white, bilobed in front, rounded behind." (J. W. Williams).

Habitat: Tributary of the Wey (Blackdown to Camel's Dale), Grayswood, Punch Bowl.

Family LIMNAEIDÆ.

Planorbis albus (L.)—*The White Trumpet Snail*.

This *Planorbis*, in Haslemere, belies its name, for it is usually found stained the colour of its habitat. These flattened coil-shape shells are not numerous in this district, and **albus** is the most common of them. The shell is thin, convex above and concave underneath. It is striated, and the last whorl is much larger than the preceding one. It was first turned up at the Fleur de Lis Pond (opposite Timber Yard, Fernhurst Road), and, subsequently at Whatman's.

P. contortus (L.)—

has a concavity in the middle of the upper side, and is deeply umbilicated. It is a yellowish shell (three-tenths in. diameter). The animal is black.

Habitat: Frensham Pond.

P. umbilicatus (MULL.) [*P. complanatus* (JEFF.)]—

is another Frensham species.

Physa fontinalis (L.)—*The Fountain Bladder Snail*.

This species carries a sinistral or left-handed shell, by which it may be readily distinguished from most British land and fresh-water forms, which have dextral or right-handed shells. It is shining, transparent, and greyish horn-coloured, the last whorl is extremely large, quite dwarfing the others. Height, about $\frac{1}{2}$ in. Animal black-grey, mantle bilobed, one lobe of which is split into

six and the other into nine digitated processes which, when expanded, lap over the shell. (J. W. Williams, Ed. 1888, p. 72).

Habitat : Frensham Pond.

Limnæa peregra (MULL.)—*The Wandering Pond Snail.*

As everywhere else, this *Limnæa* is by far the most abundantly-distributed water snail in the district. It is in every stream, saving those waters where the bottom is composed of clay and ironstone (as at Greyswood and Hammer)—conditions not favourable, apparently, to molluscan growth. It is subject to considerable perplexing variation.

L. peregra carries a shell somewhat resembling that of a *Physa*, but larger, coarser, and differentiated from *Physa* by being covered with an epidermis. The colour varies from yellowish-grey to dark reddish-brown—the soil of the pond bottom would appear to be an important factor in producing results in that direction. Height rarely over $\frac{3}{4}$ in., and frequently less. The animal is spotted with black and mottled black and yellow—a brilliant inhabitant of a rather dingy domicile. The variations will, probably, be referable to those designated by various authorities as **ovata**, **lutea**, **lacustris**, **diaphana** MINOR (?), and monstrosity DECOLLATUM ; but the collector must exercise great caution in labelling this elastic species.

L. stagnalis (L.)—*The Great Pond Snail.*

This big fellow is trumpet-shaped, and may be easily identified by the height of the spire—exceeding that of any other of our water snails—which attains to just upon two inches. It is a brittle shell, thin, and horn coloured. The animal is yellow, speckled with brown and white.

Habitats : Frensham Great Pond and the ponds at Lowder Mill.

L. truncatula (MULL.)—*The Dwarfed Limnea.*

Farmers should beware of this species. It harbours a parasite, **Fasciolo hepatica**, which is deadly to sheep—[the Common Liver Fluke in the winter of 1879-80 cost the country the lives

of no less than three million sheep. Camb. Nat. Hist., vol. III., p. 61]. This parasite passes through the following successive stages:—

1. The free ciliated embryo.
2. Sporocyst, which lives in the lung cavity of *L. truncatula*.
3. Redia, which lives in the digestive gland of above.
4. Cecarian stage—escaped from mollusc and encysted upon grass, and thus taken into the bodies of sheep.
5. The mature Distoma developed from the cecarian stage in the bile of sheep. (Taylor's Brit. L. & F. W. Mol., I., p. 423).

This shell is turreted in appearance—the whorls being angulated at the upper sides. Height, half-an-inch. Animal grey, spotted black.

The var. **minor** has been taken at Houndless Water.

Sub-Family ANCYLINÆ.

Ancylus fluviatilis (MULL.)—*The Fresh Water Limpet.*

By its method of adhesion to stones, and the general shape of its shelly covering, this species somewhat resembles a limpet. It, however, claims no near relationship—apart from that of class—to the Patellas of the sea-shore. It is a tiny right-handed shell, with decided spiral tendencies, striated, and horn-coloured. The animal is grey, spotted black.

It inhabits briskly-running streams. The Wey at Camel's Dale and the Arun Brook (near Fisher Street) contain it.

Family PALUDINIDÆ.

Bythinia tentaculata (L).

Bythinia may at once be distinguished from a Limnæa by its oval-shaped mouth, which is closed by a tightly-fitting operculum. Height, five-eighths-of-an-inch, often less. Animal black, spotted with gold, with long tentacles bearing at their extremities large black eyes.

Not common locally—the pond in the lane between East Street and Holdfast Copse once yielded examples, but not recently.

Class **ACEPHALA** (headless).
 Sub-class **PELECYPODA** (axe-footed).
 Order **LAMELLIBRANCHIATA** (with plate-like gills).
 Sub-order **ISOMYA**.

Family **UNIONIDÆ**.

Anodonta cygnea (L.)—*The Swan Mussel*.

This large freshwater bivalve, in fully-grown specimens, is oval in shape and swollen out at the sides. The hinge-line is straight, the front end closed and rounded, and the hinder end compressed above and slightly gaping. Some local examples measure $4\frac{3}{4}$ inches from anterior to posterior end, and $3\frac{1}{4}$ inches from hinge to opposite margin.

The ponds at Imbahms, Lowder Mill, and Frensham contain this Anodon.

A. anatina (L).

is a smaller but very similar specimen, and is found with *A. cygnea*.

Family **SPHÆRIIDÆ**.

Sph. lacustre (MULL).

This little rounded bivalve is thin, fragile, and easily broken. It is yellowish-white in colour, and transparent. Size not exceeding a quarter-of-an-inch either way. Animal whitish, with longish siphons.

Habitat : Whatman's pond.

Pisidium amnicum (MULL).

Triangular in outline, swollen and striated in lines of growth. Animal whitish.

P. fontinale (DRAP).

White and finely striated in lines of growth. Exceedingly small.

Both species are found in Barfold Lane and Valewood Pond.

These little bivalve molluscs are the cause of much controversy as to the number of species contained in the genus. Authorities are not agreed as to which rank as genuine species, and it is possible that our local *Pisidiæ* number more than shown above.