

ded surface, the bands becoming conditions are unfavorable, either cold in the hollows of the trees or under rocks elsewhere, or under sacks at the ground. It thus becomes an easy refuge to tree. A few snails placed by the trees in March, increased in such numbers by mid-summer of the same year with some variation from the north, to the Caloosahatchie river probably native to Florida, as specimens about the hummocks and elsewhere. Its habit of feeding on the sooty mould not known until within the past two

snails for the injurious sooty mould. Hence to observe their treatment of the fungi parasitic on orange insects is of value to orange growers. These snails as an effective parasite on the fungus also parasitic on the white fly; the sooty mould fungus, both parasitic on the white fly, is so effective in control of the white fly as to prevent the spreading hyphæ for some distance. It seems that the snails occasionally destroy the spreading hyphæ, but evidently not the fruit of the fungus, since this fungus is still present in the groves in the Manatee region where the pink fungus is also abundant in the groves and is untouched by them. The snails are not affected by either the red or the gray fungi, and it is probable that they are not affected by the pink fungus. Colonies of the snails are found where the white fly injury is severe and where the growth of the snail is retarded. It is given to the habits of the snail, as well as to the conditions against unfavorable conditions. The tree seems to afford a needed protection. It is probable that sprays can not be used

on trees stocked with the snails without injury to the colony, for, although protected by the shell from the immediate effect, sufficient spray probably clings to the sooty mould on which they feed to destroy them. The beneficial parasitic fungi and the snails may be allowed to work together on unsprayed trees. The snail is here spoken of as the Manatee snail since while recorded as occurring in other parts of the State it was found working on the orange groves first in the Manatee region.

NOTES.

Collecting in the Everglades. I have recently returned from a collecting trip in the Everglades. Most of the collecting was done at a point where the Big Cypress Swamp and the Everglades meet, about 80 miles from Myers and 35 miles from Immokalee P. O. *Drymaeus dominicus* Reeve was found in the air-plants. Dead shells of *Glandina truncata* var. *minor*, were plentiful, but live ones scarce. A few *Zonitoides arboreus* were also found in air-plants. *Polygyra cereolus* var. *carpenteriana* and *uvulifera* I did not collect. Beautiful specimens of the glossy, dark, amber-colored *Physa cubensis* Pfr., were found on the under side of the leaves of water plants. *Planorbis intercalaris* Pils., and *P. tumidus* were very plentiful, the latter in the more shallow water. *Ancylus peninsulæ* Pils. & Johns., was found on decayed wood in the Cypress Swamp. *Ampullaria depressa* is abundant on the edge of the Everglades. The shells are heaped around isolated cypress trees, where they are dropped by the hawks which feed upon them; a bright yellow variety without bands is occasionally found. A small *Unio* was common in a stream near Immokalee.

A. G. REYNOLDS.

OUTPUT OF AMERICAN PEARLS.—Dealers in American pearls state that the past season showed a diminished output of fine gems, but a gain in the traffic in baroques or pearl formations of irregular shapes.

The most valuable pearl discovered last season was taken from the Wabash river, near Mount Carmel, Ill. This was a pink-white gem of eighty grains, and is valued by its owner at \$8000.

A pearl valued at \$5000 was found in a mussel shell taken from the Skillet Fork river, Carmi, Ill. Other pearls, worth from \$500 to \$3000, were found last year; but such fortunate discoveries were considerably fewer in number than in former years.

Nearly every year witnesses a shifting of the pearl-hunting industry. The Kankakee river, Indiana, was the newest field last season, and some valuable gems were found there.

Of late, French buyers have been actively represented in the American market. The activity of these foreign buyers, together with the diminished supply, was largely responsible for the fact that prices at the close of the season ranged from 25 to 35 per cent. higher than they did a year before.

Despite the fact that American pearls now command a higher price than ever, the volume of business has shrunk because of the destruction of so many of the mussel beds.

In one year the output of the rivers of Arkansas was valued at \$2,000,000. Last year, some experienced dealers assert, the value of the whole American product, exclusive of baroques, was not worth more than \$500,000.

Dealers charge that many fine pearls are rendered valueless by the practice of button houses, and those who fish for them, of throwing mussels into hot-water vats, in order to open great quantities of shells rapidly. These button houses seek the mother-of-pearl in the shells.

Baroques, or pearls of irregular shapes, have attained a prominent place in commerce. Some of them have a sheen or opalescence equal to the quality of the finest gems.

Until recently, pearl hunters sought only symmetrical shapes, and the baroques were left as playthings for children along the streams, or were cast aside.

The influence of the "new art" originated a demand for these angular, irregular and eccentric formations.

Jewelers now use the baroques in making scarf pins, chrysanthemums, figures and ornaments.

The long and narrow shapes, especially, lend themselves with readiness to the jeweler's art. As many of these odd formations were found to have attractive color, lustre or iridescence, the public soon found a liking for them.—*North American*.

COCHLIOPA ROWELLI IN CALIFORNIA.—In response to an inquiry in the December NAUTILUS concerning the habitat of this species a single note has been received, referring to the original finding of the shell. It has apparently not been found since. The note follows: "*Cochliopa Rowelli*, was named from shells collected by me, near Baulinas Bay (not Clear Lake) Marin Co., California."—J. Rowell.

ON THE GENERIC NAME ANOSTOMA.—At the monograph of this genus (*Man. of Conch.*, XIV) not notice that two modifications of the same name: *Anostomus* Klein in Walbaum, *Pet. Arted.* 659, 1792, and *Anastomus* Bonnaterra, *Encycl.* xciii, 1790. Whether these conflict with the name depends upon whether the different spelling be different name—a question still in dispute. *Tom* next name applied to the molluscan *Anostoma*.—

ON THE PATHOLOGY OF SPHERIUM.—At *Spharium solidulum* Pr., in company with several Des Moines, Iowa, collected and sent for examination Hyning, there were several dozen specimens of normal and evidently of a pathological nature. Usually smaller than the average, almost globular, nearly as broad as in the normal form—apparently distinct species. At the anterior margin of the more or less marked scar, contiguous to the anterior and the lateral teeth. This was evidently caused by one and the same agency, probably a parasite, which acted in some way and thus causing the deformity. The effect was not only local, as is evident by the line of growth, from that place, all around both in nearly all specimens thus affected, and the whole mussel was checked. Some larger specimens with irregular growth, show the same scar at the same places only slightly marked.

Similar mussels have been noticed before, from never in such numbers. Also some *Pisidia* were affected. It is hoped that fresh, living specimens will be secured in order to ascertain the cause of the deformity.—V

PUBLICATIONS RECEIVED.

CATALOGO DE LOS MOLUSCOS TESTÁCEOS DE LAS ISLAS FILIPINAS, JOLO Y MARIANAS. I, MOLUSCOS MARINOS 1905, xvi + 408 pp. Since 1840, when the description of a rich collection was begun, the Philippines have shown a great number and beauty of their marine shells.

witnesses a shifting of the pearl-hunting industry, Indiana, was the newest field last season. Gems were found there.

Buyers have been actively represented in the activity of these foreign buyers, together with the supply, was largely responsible for the fact that the season ranged from 25 to 35 per cent. higher before.

But American pearls now command a higher volume of business has shrunk because of the depletion of the mussel beds.

Output of the rivers of Arkansas was valued at \$100,000, some experienced dealers assert, the value of a product, exclusive of baroques, was not worth \$100,000.

But many fine pearls are rendered valueless by roughness, and those who fish for them, of throwing away the shells, in order to open great quantities of shells. Some houses seek the mother-of-pearl in the shells. Some of irregular shapes, have attained a prominent luster. Some of them have a sheen or opalescence that makes them the finest gems.

But hunters sought only symmetrical shapes, and these as playthings for children along the streams,

the "new art" originated a demand for these eccentric formations.

These baroques in making scarf pins, chrysanthemum ornaments.

These row shapes, especially, lend themselves to the jeweler's art. As many of these odd formations have an attractive color, lustre or iridescence, the public prize them.—*North American*.

PEARLS IN CALIFORNIA.—In response to an inquiry concerning the habitat of this species of NAUTILUS concerning the habitat of this species received, referring to the original finding of the pearls, it has not been found since. The note follows: "This was named from shells collected by me, near (near Lake) Marin Co., California."—J. Rowell.

ON THE GENERIC NAME ANOSTOMA.—At the time I prepared a monograph of this genus (*Man. of Conch.*, XIV, p. 109, 1901) I did not notice that two modifications of the same name were already in use: *Anostomus* Klein in *Walbaum, Pet. Arted., Gen. Pisc.*, III, p. 659, 1792, and *Anastomus* Bonnaterre, *Encycl. Méth., Ornith.*, p. xciii, 1790. Whether these conflict with the molluscan *Anostoma* depends upon whether the different spelling be held to constitute a different name—a question still in dispute. *Tomogeres* Montf. is the next name applied to the molluscan *Anostoma*.—H. A. P.

ON THE PATHOLOGY OF SPHERIUM.—Among thousands of *Sphaerium solidulum* Pr., in company with several other species, from Des Moines, Iowa, collected and sent for examination by Mr. T. van Hyning, there were several dozen specimens of special interest, abnormal and evidently of a pathological nature. They were considerably smaller than the average, almost globular, the beaks being nearly as broad as in the normal form—apparently representing a distinct species. At the anterior margin of the shell there was a more or less marked scar, contiguous to the anterior adductor muscle and the lateral teeth. This was evidently caused in all specimens by one and the same agency, probably a parasite affecting the mantle edges in some way and thus causing the deformity of the shell. And the effect was not only local, as is evident by the fact that a coarse line of growth, from that place, all around both valves is noticeable in nearly all specimens thus affected, and the normal growth of the whole mussel was checked. Some larger specimens, of more or less irregular growth, show the same scar at the same place, in some instances only slightly marked.

Similar mussels have been noticed before, from other places, but never in such numbers. Also some *Pisidia* were seen similarly affected. It is hoped that fresh, living specimens will be obtained, in order to ascertain the cause of the deformity.—V. STERKI.

PUBLICATIONS RECEIVED.

CATALOGO DE LOS MOLUSCOS TESTÁCEOS DE LAS ISLAS FILIPINAS, JOLO Y MARIANAS. I, MOLUSCOS MARINOS, por J. G. Hidalgo, 1905, xvi + 408 pp. Since 1840, when the description of Cuming's rich collection was begun, the Philippines have been noted for the great number and beauty of their marine shells. A very large num-