

Thought and Labor.

Ruskin says: It is a no less fatal error to despise labor, when regulated by intellect, than to value it for its own sake. We are always in these days trying to separate the two; we want one man to be always thinking and another to be always working, and we call one a gentleman and the other an operative; whereas the workman ought often to be thinking and the thinker often to be working, and both should be gentlemen in the best sense. As it is, we make both ungentle, the one envying, the other despising his brother, and the mass of society is made up of morbid thinkers and miserable workers. Now, it is only by labor that thought can be made happy; and the professions should be liberal, and there should be less pride felt in peculiarity of employment and more in excellence of achievement.

MIGRATION OF BLOWING VIPERS.

BY C. FEW SEISS.

A few seasons ago, a narrow sandy island on the coast of New Jersey was overrun with countless numbers of the common toad (*Bufo lentiginos Americanus*). The toad is generally of crepuscular habits, except during cloudy and rainy weather, but here they were met with, out in search of food, at all hours of the day, even beneath the hot glare of the noon-day sun. It may be that, had they all waited until the cool of the evening to hunt for their insect prey, many of the weaker and less active toads would have been supperless. So, by hunting both by day and night, they were able to secure both diurnal and nocturnal insects. Over two hundred toads were counted in a short stroll between 4 and 5 o'clock in the afternoon of a July day. At this period there were no snakes of any kind to be met with on the island. That a few did exist I do not doubt, but they were not observed.

Now, this narrow island is separated from the mainland by a small bay or thoroughfare, which is perhaps over a quarter of a mile wide at its narrowest portion. The vegetation on the island consisted of little else than rank grass, stunted cedars, and pines.

In the season following the one above noted, the toads were again innumerable, but, what was startling, "blowing vipers" (*Heterodon platyrhinus*) were numerous also. They were observed in nearly every part of the island, and were seen pursuing, capturing, and swallowing the toads, as though bent on their extermination. Sometimes a toad would endeavor to escape by quickly burrowing into the sand, but the snake, having marked the spot where the toad disappeared, would force its head, with shovel-like snout, into the sand, seize the unfortunate toad, drag it from its hiding place, and swallow it.

What was the cause of this sudden appearance and number of snakes? They made their appearance in early summer, when the young *Heterodons* were not yet out of the egg, and it requires several months of growth before they are capable of mastering an averaged sized toad. Did they come from the mainland by swimming across the bay, which at its narrowest part is a quarter of a mile wide? This would seem like a great undertaking for a non-aquatic species, but, nevertheless, it is the only way in which they could have come. A migration of snakes has never before come under my notice, and yet I must consider this sudden appearance of "blowing vipers" as such. It is highly probable that food became scarce in their old haunts, and they migrated to the island in hopes of finding food more plentiful. It is not probable that their sense of smell is so highly developed as to have scented the toads from such a distance, and that they were quitting their old home with the certain knowledge that food in abundance awaited them on this sandy island.

In the summer following this migration, toads were not numerous, and only a few snakes were observed; and such, I learn, has been the case for the two or three intervening years since then. Of course, great numbers of the snakes were killed by man; not because they were thought to be poisonous, for this species is here generally and correctly understood to be perfectly harmless, nor always for mere wantonness, but from the belief that in destroying the snakes they were preserving the lives of many toads, which were beneficial to man, inasmuch as they fed upon mosquitoes. Now, the tormenting mosquito (*Culex damnosus*) is by far too small a species of game for the toad. I have examined the contents of the stomachs of several maritime toads, but failed to find mosquitoes. Very young toads, which have just left the water and the tadpole stage, do feed upon minute insects, such as gnats, ants, aphides, etc., but I refer only to the mature animals.

MOTHER-OF-PEARL.

The principal production of Tahiti is mother-of-pearl. This is what stimulates her commerce, this is what gives rise to the relatively important exchanges that take place in these far-off lands of Oceanica, and this is what attracts those vessels which, for a century past, have been sailing among the desolate and wild islands

**PEARL FISHING IN TAHITI.**

that make up the archipelagoes of Tuamotu, Gambier, and Tubuai.

On account of its rarity, mother-of-pearl has always been an object of luxury. Before navigators discovered that part of the world which is lost in the immensity of the Pacific, it was still rarer than it is now; it had more value, perhaps, but it was assuredly neither more sought for nor more prized. At present it is much employed in the manufacture of many objects. The mother-of-pearl employed in the industries is furnished by various species of shell-fishes, the most esteemed, most iridescent, and also the most beautiful being that

produced by the pearl oyster. Again, two sorts of pearl oysters are distinguished. One of these, known as the pintadine (*Meleagrina margaritifera*), is found in China, the Indies, in the Red Sea, off the Comore Islands, to the northwest of Australia, in the Gulf of Mexico, and particularly off the Tuamotu and Gambier Islands.

The other, which is more commonly known as the pearl oyster (*Meleagrina radiata*), is found in the Indies, in the seas of China, in the sea of the Antilles, in the Red Sea, and to the north of Australia.

The former of these has a harder, more azure, and more transparent shell, and one that attains larger dimensions than that of the latter. Some have been found that measured as many as 12 inches in diameter and weighed more than twenty pounds. The *Meleagrina radiata* rarely exceeds 4 inches in its largest dimensions, and never reaches a weight of five ounces. The two species furnish pearls. According to the fashion, or the prevailing taste, sometimes those of the one are preferred and sometimes those of the other; nevertheless, those of the pintadine have a brighter luster and more transparent and intense tones than those of its congener.

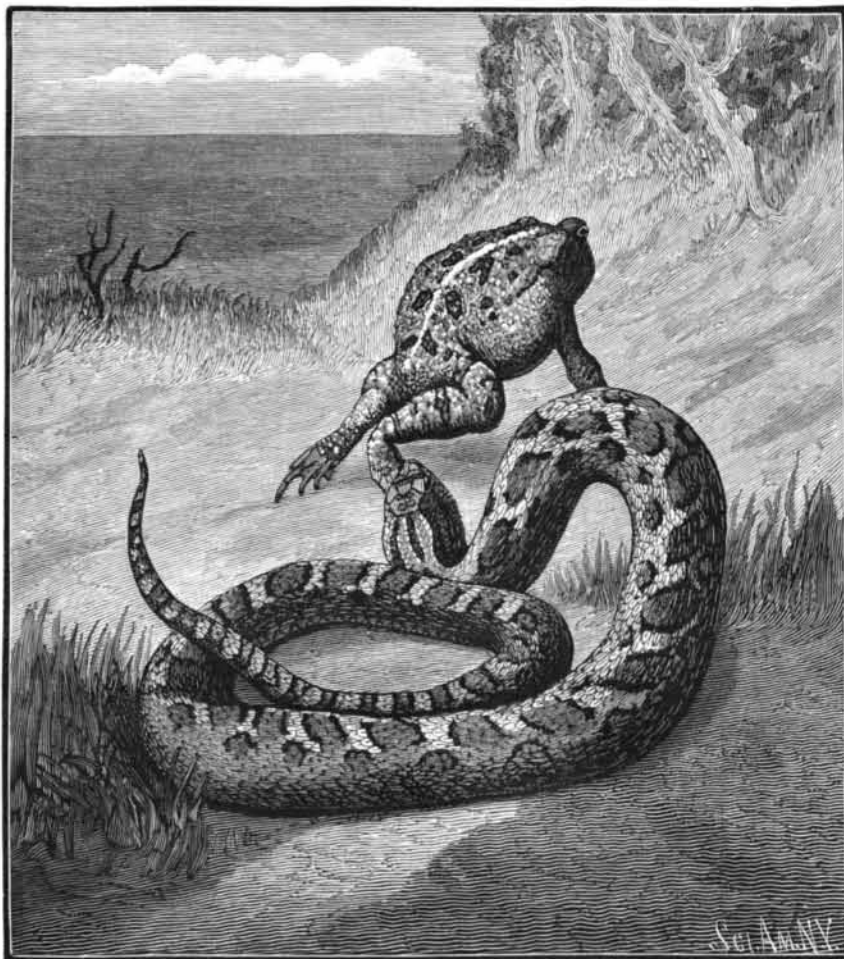
It is difficult to estimate the money value of the pearls collected in the French possessions of Oceanica. We cannot even fix upon an approximate figure as regards this, since this commerce escapes all control, and proceeds after a manner clandestinely. Some estimate that it reaches about \$20,000 per annum, and others that it amounts to \$100,000. According to what I have seen in the Tuamotu Islands, and, on another hand, considering the quite large number of persons who, at Papeete only, are concerned in this trade and live by it, I would give it as my opinion that it amounts to \$60,000. The most important markets for fine pearls are found in England.

The pintadine comes from the tropics. The archipelago of Tuamotu and Gambier is, as I have stated, the point where it is found in the greatest abundance. Here it finds surroundings that are congenial to it.

This archipelago, which was annexed at the same time as the islands of Tahiti and Moorea, consists of eighty islands, almost all of which yield mother-of-pearl, and seventy-two of which are inhabited intermittently by individuals of the Maori race. France has an excellent and devoted population there, which is very proud of its new nationality, and which remains indifferent to all attempts made against our influence. It loves France, proclaims the fact, and manifests it loudly every time that occasion requires it. Industrious, docile, submissive, of mild and simple manners, observing with scrupulous fidelity the laws and regulations that have been given it, it is one of the poorest on the face of the globe. The narrow tongue of land, or rather the crown of arid reefs that surrounds the lagoon of these coral islands, and which is destitute of vegetation, scarcely affords this people sufficient food for its miserable and precarious existence. While the neighboring happy population which dwells upon the fortunate shores of the Society Islands leads a life of ease and pleasure, where everything grows without labor and in abundance, the unfortunate Tuamotun is reduced to the necessity of feeding upon the cocoa-

nut and a few rare and meager seeds of Pandanus (nearly the only fruits on these sandy shores), fish, and shell-fish, which, during several months in the year, are poisonous.

The Tuamotu people are essentially nomadic—through necessity as well as through taste. When one lagoon is exhausted, when diving no longer yields anything, the native, without sorrow or regret, or without caring even, places his family and his goods in his boat, abandons the hut that he had built, and goes, somewhat at the will of the winds, to seek elsewhere, in another island, the wherewith to live. His only industry is diving. All take part in this—women as well as children. The women have a truly wonderful aptitude for this arduous and laborious occupation. At Anna there is a woman who explores depths of 25 fathoms, and sometimes remains under water for three minutes, and she is not an exception. And, then, how dangerous are these investigations in the dark depths of the lagoon, where reign as masters hungry sharks, which, when they cannot be avoided, must be fought! There does not pass a year in which some diver does not come out of the water mutilated. When an accident happens, terror reigns among the divers, and the fishing for mother-of-pearl ceases for some days. But this feeling of fear and of danger does not last, for it becomes necessary to give way to the imperious needs of life. To the Tuamotun, mother-of-pearl is current money. It is with this that he buys the scanty clothing that he wears,

**BLOWING VIPER SWALLOWING A TOAD.** (Drawn from Nature.)