Fortunately its loud hissing when disturbed warns those who come within dangerous proximity to it.

The small Viperine snake, *Echis carinata* (fig. 17), which scarcely exceeds a length of 20 inches, shares with the pre­ceding part of its range, being found in the arid districts of southern India, and extending through the intervening parts of Asia to North Africa. It is a desert type, having the lateral scales curiously arranged, strongly keeled, with the tips directed downwards. It produces with their aid a rustling sound. Whilst some observers deny that fatal consequences have resulted from its bite, Dr Imlach reports that it (the “kuppur”) is “ the most deadly poisonous snake

in Sind.” This desert type is replaced farther south in Africa where vegetation flourishes by a closely allied genus, *Atheris,* which, however, possesses a prehensile tail and vivid coloration and has assumed truly arboreal habits.

Of the pit vipers without rattles the largest and most formidable inhabit tropical America. *Trigonocephalus iararaca, T. atrox,* and *T. lanceolatus* attain to a length of 6 feet, the first two being common in Brazil and north­wards to Central America. The last is limited to some islands in the West Indies, especially Martinique and St Lucia, and is generally known by the name of “fer de lance,” which has been given to it from the markings on its head. It infests the sugar-plantations, and has greatly multiplied in consequence of the protection which the cover of the cane-fields afforded it, and the abundance of food supplied by the rats which swarm on the plantations. Thus, whilst it did a certain amount of good by the destruction of vermin, it caused a great number of deaths among the black labourers who were engaged in the fields. These three species of *Trigonocephalies* are sur­

passed in size by *Lachesis mutus,* probably the largest of terrestrial poisonous snakes, which is said to exceed a length of 10 feet, and is bulky in proportion. It is con­fined to the hottest parts of tropical America. Similar snakes, but smaller in size, inhabit the warmer and tem­perate parts of North America, viz., the Copper-head *(Cenchris contortrix)* and the Crater-mocassin *(C. piscivorus),* the former of terrestrial habits, the latter being always found near water and feeding chiefly on aquatic animals. Both are much feared and cause accidents more frequently than rattlesnakes, being more aggressive and striking the intruder without previously warning him of their presence. In the Indian region this type of pit vipers without rattles is likewise well represented, one genus *(Trimeresurus)* being adapted for an arboreal life, like *Atheris* among the *Viperidæ.* Their body (fig. 18) is not more elongate than that of other ground Crotalines, but their tail is prehensile, and their colour generally resembles that of the bright foliage among which they live. Some­times bright yellow or red markings render these snakes still more pleasing to the eye. Accidents caused by them are of not uncommon occurrence, but fortunately only a few individuals exceed a length of 2 feet, and the consequences of their bite are less to be dreaded than of that of other allied genera. Indeed, numerous cases are on record which show that the constitutional symptoms caused by their poison were of short duration, lasting only from two to forty-eight hours, and being confined to nausea, vomit­ing, and fever. The bite of larger specimens, of from 2 to 3 feet long, is more dangerous and has occasionally proved fatal. They feed on frogs, mammals, and birds. (a. c. g.)

SNAKE-STONE, a name sometimes applied to Water- of-Ayr stone (see Hone, vol. xii. p. 134). Certain stones reputed, on insufficient grounds, to possess efficacy as antidotes to snake-bites are known as snake-stones (see above, p. 192). The term is also popularly applied to ammonites and certain other fossils which, owing to their spiral shape, were formerly regarded as petrified snakes.

SNEEK, a town of the Netherlands, in the province of Friesland, 18 miles south-south-west of Leeuwarden, with which it is connected by canal and (since 1885) by rail. It is one of the great butter and cheese markets of the country and has communal buildings (1863), a town-house, a court-house, an orphanage, a synagogue, and several churches, in one of which (the Groote or Maartenskerk) is the tomb of the naval hero Lange Pier (Long Peter). The population of the town was in 1870 8456 ; that of the commune, which numbered only 3253 in 1714, was 9248 in 1870 and 10,496 in 1880.

Sneek appears in the list of Frisian towns in 1268. It was almost reduced to ashes in 1295, and again in 1417 and 1457. In 1515 it was attacked and in 1517 formally besieged by the Burgundians. A diet met in the town in the close of this latter year ; and long after, in 1672, Sneek was again the seat of an assembly of the states. In 1570 and in 1825 there were severe inundations.

SNELL, Willebrord (1591-1626), commonly known as Snellius, astronomer and mathematician, was born at Leyden in 1591. In 1613 he succeeded his father as professor of mathematics in the university of Leyden. In 1615 he planned and carried into practice a new method of finding the dimensions of the earth, by deter­mining the distance of one point on its surface from the parallel of another, by means of a triangulation. His work *Eratosthenes Batavus,* published in 1617, describes the method and gives as the result of his operations be­tween Alkmaar and Bergen-op-Zoom a degree of the meridian equal to 55,100 toises = 117,449 yards. (A later recalculation has given 57,033 toises = 121,569 yards, after applying some corrections to the measures indicated by himself.) Snell also distinguished himself as a mathe­matician, and discovered the law of refraction, which,