or some other person whose mouth is free from any solution of continuity. Cupping-glasses, where they can be applied, answer the same purpose, but not with the same effect. (4) By cauteriza­tion with a red-hot iron a live coal, nitrate of silver or carbolic or mineral acid, or by injections of permanganate of potassium, the poison which remains in the wound can be destroyed or neutralized. Ammonia applied to the wound as a wash and rubbed into the neighbouring parts is likewise undeniably of great benefit, especially in less serious cases, since it alleviates the pain and reduces the swelling. (5) Internally, stimulants are to be taken freely ; they do not act as specifics against the virus, but are given to excite the action of the heart, the contractions of which become feeble and irregular, to counteract the physical and mental depression, and to prevent a complete collapse. Brandy, whisky, and ammonia in any of its officinal forms should be taken in large doses and at short intervals. The so-called “snake-stones” can have no other effect than, at the best, to act as local absorbents, and can be of use only in the very slightest cases.

Snakes are oviparous; they deposit from ten to eighty eggs of an ellipsoid shape, covered with a soft leathery shell, in places where they are exposed to and hatched by moist heat. The parents pay no further attention to them, except the pythons, which incubate their eggs by coiling their body over them, and fiercely defend them. In some families, as many freshwater snakes, the sea snakes, *Viperidæ,* and *Crotalidæ,* the eggs are retained in the oviduct until the embryo is fully developed. These snakes bring forth living young, and are called “ovo-viviparous.”

The order of snakes may be divided into the following sub-orders and families or groups.

First Sub-order.—Hopoterodontes.

Small burrowing snakes, with a cylindrical body, which is nearly of the same thickness from its anterior to its posterior extremity, and is covered with smooth polished scales of the same size in its whole circumference. No mental groove. Head small, not distinct from the trunk, with imbricate scale-like scutes. Eye rudimentary. Mouth very narrow, at the lower side of the head, armed with small teeth in one jaw only.

Family 1. Typhlopidæ.—Teeth in the upper jaw only.

Genera : *Typhlina, Onychocephalus, Typhlops* (see figs. 6, 7).

Family 2. Stenostomatidæ.—Teeth in the lower jaw only.

Genera : *Stenostoma, Siagnodon.*

Second Sub-order.—Ophidii Colubriformes.

Innocuous snakes. Teeth in both jaws, none of the anterior being grooved or perforated. Scales more or less differentiated. A mental groove is generally present. Eye developed.

Family 1. Tortricidæ.—Body cylindrical, with a rounded head not distinct from the neck ; tail very short. Rudiments of hind limbs hidden in a small groove on each side of the vent. Scales rounded, polished, those of the ventral series but little enlarged ; only one pair of frontals ; six upper labials. Eye small. Mouth of moderate width ; teeth few in number, sub-equal in size.

Genera : *Ilysia* (tropical America) ; C*ylindrophis* (India).

Family 2. Xenopeltidæ.—Body cylindrical, with a rounded head not distinct from the neck ; tail short. No rudimentary hind limbs. Scales rounded, polished ; ventral shields well differentiated ; two pairs of frontals ; occiput covered with five shields. Eye small. Mouth of moderate width ; teeth numerous, sub-equal.

One genus, from the Indian region : *Xenopeltis.*

Family 3. Uropeltidæ (Rough Tails).—Body cylindrical, with a short head not distinct from the neck ; tail very short, trun­cated or scarcely tapering, frequently terminating in a rough naked disk or covered with keeled scales. Scales rounded and polished, those of the ventral series being always somewhat larger than the rest ; only one pair of frontals ; four upper labials. Eye very small. Mouth of moderate width ; teeth few in number, small, sub-equal, none on the palate. Mental groove generally absent. Small burrowing Indian snakes.

Genera : *Rhinophis, Uropellis, Silybura, Plectrurus, Melanophidium.*

Family 4. Calamariidæ.—Small snakes, with a rather rigid body ; the short head not distinct from the neck ; tail more or less short. Scales in from thirteen to seventeen series ; ventral shields well developed, generally less than 200 in number ; the normal number of head-shields always reduced by two or more of them being confluent. Cleft of the mouth of moderate width ; nostril lateral ; palatine teeth present.

African genera : *Homalosoma, Calamelaps, Prosymna, Opisthotropis, Xenocalamus, Amblyodipsas, Elapops, Urobelus, Uriechis.* Europeo-Asiatic genera : *Rhynchocalamus, Psilosoma.* Indian genera : *Calamaria, Macrocalamus, Typhlogeophis, Xylophis, Oxycalamus, Brachyorrhos, Elapoides, Rhinosimus, Aspidura,*

*Haplocercus, Achalinus* (Japan). North-American genera: *Carphophis, Conocephalus, Streplophorus, Contia.* Tropical American genera: *Homalocranium, Arrhyton, Rhegnops, Colo- bognathus, Geophidium, Catostoma, Stenognathus, Leptocalamus, Chersodromus, Elapomorphus, Cercocalamus, Microdromus, Stenorhina, Rhinostoma, Rhynehonyx.* Genus with wide dis­tribution : *Geophis.*

Family 5. Oligodontidæ.—Body rather rigid, covered with smooth rounded scales ; head short, not distinct from neck, and nearly always with symmetrical arrow-shaped markings above. Ventral scutes broad ; rostral shield large, more or less produced backwards. Maxillary teeth few in number, the hindmost enlarged, not grooved. Indian.

Genera : *Oligodon, Simotes.*

Family 6. Colubridæ.—This family comprises the majority of the non-venomous snakes and the least specialized forms. Their body of moderate length compared to its circumference, flexible in every part ; the head, trunk, and tail—in fact all parts—well pro­portioned ; nostril lateral ; teeth numerous in the jaws and on the palate, but without fangs in front or in the middle of the maxillary. Double row of sub-caudals. This family may be divided in accordance with the general habitus or mode of life into several groups, which, however, are connected by numerous intermediate forms.

The group of (i.) Ground Colubrides, *Cοronellina,* consists of small forms, generally of brilliant coloration, and comprises the following genera :—

Genera with wide distribution : *Ablabes, Cyclophis, Tachymenis, Coronella, Liophis.* African: *Psammophylax, Ditypophis.* Indian: *Megablabes, Nymphophidium, Odontomus.* Tropical American : *Erythrolamprus, Pliocercus, Hypsirhynchus.*

The group of (ii.) True Colubrides, *Colubrina,* are land snakes, which swim well when driven into the water, or climb when in search of food ; they are of moderate or rather large size.

Genera with wide distribution : *Coluber, Elaphis, Plyas, Zamenis.* African genera : *Xenurophis, Herpetæthiops, Scaphiophis.* In­dian genera : *Compsosoma, Xenelaphis, Cynophis, Lielaphis, Lytorhynehus.* Europeo-Asiatic : *Rhinechis.* North-American: *Pituophis.* South-American: *Spilotes.* Australian: *Zamenophis.*

The group of (iii. ) Bush Colubrides, *Dryadina,* leads up to the true Tree snakes, its members having a more or less elongate and compressed body, frequently of green colour ; they are more numer­ous in the New than in the Old World, and belong to the following

Genera : *Dromicus, Herpetodryas, Herpetoreas, Philodryas, Diplotropis, Zaocys, Dryocalamus.*

Finally, the group of (iv.) Freshwater Colubrides, *Natricina,* are generally neither elongate nor compressed, and possess frequently keeled scales. They freely enter water in pursuit of their prey,— chiefly frogs and fishes.

Genera with wide distribution: *Tropuionotus, Heterodon.* African·. *Grayia, Neuslerophis, Limnophis, Hydræthiops, Maerophis.* Indian : *Xenochrophis, Prymnomiodon, Atretium.* North- American : *Ischnognathus.* South-American : *Xenodon, Tomodon.*

Family 7. Homalopsidæ (Freshwater Snakes).—Body of mode­rate length, cylindrical or slightly compressed ; head rather thick, broad, not very distinct from neck ; tail strong, of moderate length. Ventral scutes rather narrow ; double row of sub-caudals. Eye small. Nostrils on the upper surface of the head, small, pro­vided with a valve ; nasal shields enlarged at the expense of the anterior frontals, which are frequently confluent into a single shield. The other head shields may deviate from the usual arrangement.

Indian genera : *Fordonia, Cantoria, Cerberus, Hypsirhina, Ferania, Homalopsis, Hipistes, Herpelon* (see fig. 8), *Gerrarda, Taehyplotus.* American genera : *Calopisma, Helieops, Hy­drops, Tachynectes, Hydromorphus.*

Family 8. Psammophidæ (Desert Snakes).—Loreal region very concave. Scales smooth ; double row of sub-caudals. Cleft of the mouth wide ; nostril lateral. Eye of moderate size. Shields of the head normal ; posterior frontals rounded or angular behind ; vertical narrow ; supra iliaries prominent. Loreal present. One of the four or five anterior maxillary teeth longer than the others, and the last grooved. Old World.

Genera : *Psammophis, Cœlopeltis, Taphrometopon, Rhagerrhis, Psammodynastes, Mimophis.*

Family 9. Rhachiodontidæ (Egg-Eaters).—Body of moderate dimensions ; head short, deep. Eyes small, pupil round. Scales strongly keeled, in twenty-three or twenty-five series. Maxillary teeth very small and few in number ; the lower spinous processes of the posterior cervical vertebræ penetrate the oesophagus and act as supplementary teeth. African.

One genus : *Dasypeltis* (see fig. 9).

Family 10. Dendrophidæ (Tree Snakes).—Body and tail much compressed or very slender and elongate ; head generally elongate and distinct from the very slender neck ; snout rather long, obtuse or rounded in front. Cleft of the mouth wide. Eye of moderate size or large, with round pupil. Shields of the head normal ; scales