Now tearing up the ſands, ſome latent vein

Fruſtrate he ſeeks ; now to the Syrtes ſhore

Return’d, he ſwallows down the briny flood

Mix’d with its rolling ſands ; nor knows his fate

And the sad poiſon’s death, but calls it thirſt ;

Then with his ſword opens his ſpouting veins,

And drinks the burſting blood.

The phytas or *amodytes* of Linnæus, or, according to others, the *coluber aſpis,* ſeems to have been the ſerpent made uſe of by Cleopatra to deſtroy herſelf. This woman, to terminate a diſſipated life with an eaſy death, ordered her phyſicians to prepare a poiſon for her which might best effect this purpoſe. Having tried a num­ber of different experiments upon condemned criminals, they at laſt diſcovered this ſpecies of aſp, which brings on death without any previous appearance of diſtemper or hiccough : the face ſeems in a slight perſpiration, an eaſy inſenſibility and lethargy creeps upon the whole frame, and the perſon bitten ſeems almoſt totally igno­rant of his approaching diſſolution. Having acquaint­ed the queen with their diſcovery, ſhe applied the aſp either to her boſom or her arms ; or, according to ſome authors, dipping the point of a needle in the poiſon, and pricking herſelf with it, ſhe expired in an eaſy ſleep.

The bite of the *naja* is ſo fatal, that a man dies by it in the ſpace of an hour, his fleſh entirely falling off his bones in a ſemidiſſolved putrid ſtate : this makes it probable that it is the ſame ſerpent which the ancients named the *ſepe.*

The experiments of Rhedi have not, in the opinion of ſome celebrated philoſophers, ſo far cleared the the­ory of the operation of the poiſon of the viper, as to leave nothing further to be deſired upon that ſubject. Fontana and Carminati have endeavoured to inveſtigate its operations more clearly. Carminati, from 11 expe­riments, deduces the following concluſions : 1. That if poiſon be inſtilled into a nerve, the animal wounded dies almoſt inſtantly ; and the whole nervous ſyſtem, to which it is rapidly conveyed, is deprived of its quality called *ſensibility.* 2. If a muſcle be wounded, it is de­prived of its irritability. This is confirmed by the ex­periments of Fontana. 3. The poiſon injected into a wounded muſcle or tendon is conſiderably longer in kill­ing an animal than that introduced into a nerve. 4. The ſymptoms which precede the death of the animal bitten are, a ſtupor, lethargy, tremors, convulsions, paralyſis of the legs (part wounded), entire diſſolution of the limbs. The blood is not always coagulated, nor its craſis diſſolved. Marks of inflammation are ſometimes diſcovered in certain parts of the animal after death, ſometimes not : theſe are the effects of ſpaſms and convulsions, not of the poiſon. 5. Not the leaſt ſign of the jaundice was diſcoverable in the eyes of any of the animals upon which Carminati made his experiments. 6. The ſtomach in every one of them was very much inflated ; a ſymptom remarked only by Fallopius and Albertini. 7. A ligature applied inſtantly above the part bitten, if it be ſo placed as to admit one, was found by ſome experiments a good preventative againſt the diffuſion of the poiſon : its compreſſion ſhould be considerable, but not exceſſive.

As few ſerpents, comparatively ſpeaking, are poiſon­ous, it may be intereſting to our readers to know what are the characteriſtics which diſtinguiſh poiſonous from harmleſs ſerpents. The external characteriſtics of the poiſonous tribe are theſe :

“ I. A broad head, covered with ſmall ſcales, though it be not a certain criterion of venomous ſerpents, is, with ſome few exceptions, a general character of them.

“ 2. A tail under one-fifth of the whole length is also a general character of venomous ſerpents ; but, ſince many of thoſe which are not venomous have tails as ſhort, little dependence can be placed upon that circumſtance alone. On the other hand, a tail exceeding that proportion, is a pretty certain mark that the ſpe­cies to which it belongs is not venomous.

“ 3. A thin and acute tail is by no means to be conſidered as peculiar to venomous ſerpents ; though a thick and obtuſe one is only to be found among thoſe which are not venomous.

“ 4. Carinated ſcales are, in ſome meaſure, characteriſtic of venomous ſerpents, ſince in them they are more common than ſmooth ones, in the proportion of nearly four to one ; whereas ſmooth ſcales are, in thole ſerpents which are not venomous, more common, in the proportion of nearly three to one.

“ Upon the whole, therefore, it appears, that though a pretty certain conjecture may, in many inſtance, he made from the external characters, yet, in order to de­termine with certainty whether a ſerpent be venomous or not, it becomes neceſſary to have recourſe to ſome certain diagnoſtic. This can only be ſought for in the mouth : we must therefore next conſider how the fangs, with which the mouths of venomous ſerpents are furniſhed, are to be diſtinguiſhed from common teeth.

“ To thoſe who form their ideas of the fangs of a venomous ſerpent, from thoſe of the rattleſnake, or even from thoſe of the Engliſh viper, it will appear ſtrange that there ſhould be any difficulty in diſtinguiſhing thoſe weapons from common teeth ; and indeed the diſtinction would really be very eaſy, were all venomous ſerpents furniſhed with fangs as large as thoſe of the fore-mentioned ſpecies. But the fact is, that in many ſpecies the fangs are full as ſmall as common teeth, and conſequently cannot, by their ſize, be known from them ; this is the caſe with the *coluber laticaudatus, lacteus,* and ſeveral others.”

Linnæus thought that the fangs might be diſtin­guiſhed by their mobility and ſituation ; but other naturaliſts have not found it a general fact that fangs are looſe in their ſockets, nor have they obſerved any diffe­rence in ſituation between the fangs of venomous ſerpents and the teeth of others. The following diſtinction is eſtabliſhed by Dr Gray in a paper inſerted in the Philosophical Tranſactions, Vol. lxxix. *All venomous ſer­pents have only two rows of teeth in the upper jaw, and all others have four.*

In the preface to the *Muſeum Regis,* and in the in­troduction to the claſs amphibia in the *Systema Natures,* Linnæus ſays, that the proportion of venomous ſerpents to others is one in ten ; yet, in the *Systema Natures,* of which the ſum total in ſpecies is 131, he has marked 23 as venomous, which is ſomewhat more than one in ſix. How he came to be ſo much at variance with himſelf, it is not eaſy to ſay ; but the laſt mentioned proportion ſeems to be not far from the truth, as Dr Gray, after examining 154 ſpecies of ſerpents, found only 26 that ſeemed to be venomous.