opening at its extremity, which is conſidered to be its mouth. See Plate DI. fig. 1, 2. This opening is con­tinued by a ſhort duct into two canals ; theſe canals paſs round every joint of the animal’s body, and convey the ali­ment (fig. 3.). Surrounding the opening of the mouth are placed a number of projecting radii, which are of a fi­brous texture, whoſe direction is longitudinal. Theſe radii appear to ſerve the purpoſe of tentacula for fixing the ori­fice of the mouth, as well as that of muscles to expand the cavity of the mouth, from their being inſerted along the brim of that opening: (See fig. 1.) After the rounded extremity or head has been narrowed into the neck, as is repreſented in fig. 2. the lower part becomes flatted, and has two ſmall tubercles placed upon each flatted fide ; the tubercles are concave in the middle, and appear deſtined to ſerve the purpoſe of ſuckers for attaching the head more ef­fectually. The internal ſtructure of the joints composing the body of this animal is partly vaſcular and partly cellu­lar ; the subſtance itſelf is white, and ſomewhat reſembles in its texture the coagulated lymph of the human blood. The alimentary canal paffes along each fide of the animal, ſending a croſs canal over the bottom of each joint, which con­nects the two lateral canals together. See fig. 3.

Mr Carliſle, who gives the beſt account oſ the ſtructure and economy of the tænia which we have ſeen, injected with a coloured ſize by a ſingle puſh with a ſmall ſyringe three feet in length of theſe canals, in the direction from the mouth downwards. He tried the injection the con­trary way, but it ſeemed to be stopped by valves. The alimentary canal is impervious at the extreme joint, where it terminates without any opening analogous to an anus. Each joint has a vafcuiar joint occupying the middle part, which is compoſed of a longitudinal canal, from which a great number of lateral canals branch off at right angles. Theſe canals contain a fluid like milk.

The tænia ſeems to be one of the ſimpleſt vaſcular ani­mals in nature. The way in which it is nouriſhed is Angu­lar ; the food being taken in by the mouth, paffes into the alimentary canal, and is thus made to visit in a general way the different parts of the animal. As it has no excreto­ry ducts, it would appear that the whole of its alimentary fluid is fit for nouriſhment ; the decayed parts probably diſſolve into a fluid which tranſudes through the ſkin, which is extremely porous.

Th is animal has nothing reſembling a brain or nerves, and ſeems to have no organs of ſenſe but that of touch. It is moſt probably propagated by ova, which may easily paſs along the circulating vessels of other animals. We cannot otherwiſe explain the phenomena of worms heing found in the eggs oſ fowls, and in the inteſtines of a fœtus before birth, except by ſuppoſing their ova to have paſſed through the circulating veffels of the mother, and by this means been conveyed to the fœtus..

The chance of an ovum being placed in a situation where it will be hatched, and the young find convenient ſubſiſtence, muſt be very ſmall ; hence the neceſſity for their being very prolific. If they had the ſame powers of being pro­lific which they now have, and their ova were afterwards very readily hatched, then the multiplication of theſe animals would be immenſe, and become a nuiſance to the other parts of the creation.

Another mode of increaſe allowed to tænia (if we may call it increaſe) is by an addition to the number of their joints. If we conſider the individual joints as diſtinct be­ings, it is ſo ; and when we reflect upon the power of gene­ration given to each joint, it makes this conjecture the more probable. We can hardly ſuppoſe that an ovum of a taenia, which at its full growth is 30 feet long, and compoſed of 400 jointe, contained a young tænia compoſed of this num­ber of pieces ; but we have ſeen young tænia not half a foot long, and not possesſed of 50 joints, which ſtill were entire worms. We have alfo many reaſons to believe, that when a part oſ this animal is broken off from the rest, it is capable of forming a head for itſelf, and becomes an independent being. The simple construction of the head makes its rege­neration a much more eaſy operation than that of the tails and feet of lizards, which are compoſed of bones and com­plicated veſſels ; but this laſt operation has been proved by the experiments of Spallanzani and many other naturalists.

When inteſtinal worms produce a diſeaſed ſtate of the animal’s body which they inhabit, various remedies are advi- ſed for removing them ; many of which are ineffectual, and others very injurious by the violence of their operation, Draſtic purges ſeem to operate upon tænia, partly by irri­tating the external ſurface of their bodies, so as to make them quit their holds, and partly by the violent contractions produced in the inteſtine, which may ſometimes divide the bodies of tænia, and even kill them by bruiſing. Mr Car­liſle propoſes the trial of a simple remedy, which (a *priori)* promîtes to be ſucceſsful ; namely, ſmall ſhocks of electricity paſſed frequently through the regions of the abdomen ; the lives of the lower orders of animals ſeeming to be easily destroyed by ſuch ſhocks of electricity as do not injure the lar­ger and more perfect animals.

Plate DI. fig. I. ſhows the head of the tænia magnified ; the mouth is in the middle of the circular plane, where the body becomes flatted and broad ; there are two hollow tubercles repreſented by the two dark ſhaded ſpots. Fig/ 2. is the ſame head, of its natural bigneſs, and which belonged to a tænia 20 feet in length. Fig. 3. ſhows the alimentary canals, in a portion of the ſame tænia, of their natural bigness. The dark-ſhaded undulating lines are the alimentary canals, which are ſeen to their full extent in this portion of the worm. Fig. 4. ſhows the middle ſyſtem of veſſels, in two joints, which are repreſented by the dark lines. Fig. 5. ſhows two joints, from one fide of which a flip was torn down to ſhow the veſſels underneath, and alſo the direction of the fibres in the flip, which are accumulated into little faſciculi like muſcular fibres. Fig. 6. exhibits three joints, having the ducts leading from the lateral oſcula injected ; the dark transverſe lines leading from each oſculum ſhow the ſize, direction, and extent of theſe ducts. Fig. 7. ſhows the edge of two joints turned forwards, and the appearance of the oſcula in this point of view. Fig. 8. repreſents the. whole of theſe canals in their relative ſituations.

For a more complete account of the tænia, we muſt refer to Mr Carliſle’s ingenious paper in the Linnæan Tranſactions.

TAFFETY or taffeta, in commerce, a fine ſrnooth ſilken stuff, remarkably gloſſy. There are taffeties of all co­lours, ſome plain, and others ſtriped with gold, ſilver, &c. others chequered, others flowered, &c. according to the fancy of the workmen.

TAGARA, a city of ancient India, the metropolis of a. large diſtrict called *Ariaca,* which comprehended the greateſt part of the Subah of Aurangabad, and the ſouthern part of Concan. Arrian ſays, that it was situated about ten days iourney to the eastward of Pultanah ; which, according to the rate of travelling in that country with loaded carts, might be about 100 Britiſh miles. This fixes its situation at Deoghir, a place of great antiquity, and famous through all. India on account of the pagodas of Elouſa. It is now called *Doulet-abad.*

TAGETES, marygold, in botany : A genus of plants belonging to the clals of *ſyngeneſia,* and order of *polygamia suρerflua;* and in the natural ſyſtem ranging under the 49th