

especially attacked. I cannot however agree with M. Dassen; for all the valuable observations which Meyer had enumerated respecting this phænomenon may be explained in a different sense, and in fact more in accordance with nature, if we start from the general point of view, by the periodical occurrence of sleep, which appears to be common to all animated beings. M. Dassen placed a pot containing *Impatiens noli tangere* during the night in a dark place, and the result was, that the leaves even during the following day retained the same direction. Another plant was placed during the daytime in a dark place, and for two entire days the leaves retained the usual direction which is proper to them in the daytime. From these and other experiments M. D. concludes that the motions of plants without swellings are caused solely by the process of vegetation, and that this is rendered evident as soon as the leaves are exposed to unnatural external influences.

I ask then, whether from the examples cited, the phænomenon of vegetable sleep can be denied? On the contrary, phænomena exactly similar may be proved to exist in animals.

The second paper in the present part, by Prof. B. Fries on the genus *Syngnathus*, will be found translated in No. VIII. of this Journal.

3. Metamorphosis observed in *Syngnathus lumbriciformis*, by Prof. B. Fries. This interesting paper, which will find its place in one of our following numbers, contains a most curious fact hitherto unobserved in the class of fish; namely, that the young of this beautiful species at their development from the egg have the entire tail covered with a fin-like membrane and possess pectoral fins. These at a subsequent unknown period are thrown off in a way similar to that of the larvæ of frogs rejecting their tails.

4. Considerations on the Dentition of the Carnivora (First Part *Feræ*) by Prof. Wiegmann. The great length of this memoir and its not being concluded in the present part obliges us to reserve the notice of it till the next part.

We now come to Prof. Meyen's Annual Report of the Results of the labours in the field of Physiological Botany during the year 1837. We mentioned in our first notice of this work, vol. i. p. 231. the nature and value of these elaborate reports, and expressed our sorrow at not being able from want of space to give translations of those on Botany and Zoology. The perusal of the present report has increased our regret, as it contains detailed analyses and reviews of most of the important memoirs and works on physiological botany published during the past year. Among others we may mention some by Mirbel,