

fasciole in *Aceste* is strikingly like that of the peripetalous fasciole of *Schizaster*, and it is indeed difficult in this genus to know whether to call it a peripetalous or an internal fasciole. Taken in connection with the course of the fasciole of *Aërope* and of *Gualteria*, in which we find the lateral ambulacra with double pores are not in the least modified within the fasciole, we cannot resist the conclusion that the internal fasciole is after all only a modification of the peripetalous fasciole; what has been called an internal fasciole is in reality only an embryonic peripetalous fasciole. If we compare the internal fasciole of *Echinocardium* with the peripetalous fasciole of a young *Brissopsis*, we shall find that it encloses mainly the abactinal region of the odd ambulacral petal, and, extending only slightly beyond the apical system, encloses only one or two pairs at the outside of the ambulacral pores of the other ambulacra, and that it is not only with increasing age that the posterior part of the fasciole extends further down on the sides of the test so as eventually to enclose the whole of the petaloid portion of the ambulacra (the abactinal portion). In *Echinocardium* and other genera in which the peripetalous fasciole always remains internal, it merely does not enclose the whole of the petaloid part of the ambulacra, and the posterior part of the fasciole remains always in close proximity to the apical system; the same is also the case in *Breynia* and *Lovenia*. In the former genus there is, however, in addition what has always been called a peripetalous fasciole. I am inclined to look upon this fasciole as a modified lateral fasciole, which takes its origin from the odd anterior ambulacral region instead of starting, as is the case in *Schizaster* and other genera, from the peripetalous fasciole in the posterior interambulacral spaces. I am led to take this view from a comparison of the genera in which this so-called internal fasciole exists for the following reasons:—

We find in *Lovenia* that the anterior extremity of the fasciole where it crosses the ambulacral region is nearly lost in the midst of the minute miliaries which cover the whole of the shallow anterior groove, and which it is difficult to distinguish from the miliaries of the fasciole, the whole anterior groove becoming, as it were, a broad fasciole from which the peripetalous fasciole of *Breynia*, where we find the same structural features, takes its origin, and to all appearances looks like a peripetalous fasciole, but is in reality, as is shown by *Lovenia*, a lateral fasciole, taking its origin from the anterior interambulacral region. In *Lovenia* this lateral fasciole has more the character of a marginal fasciole, extending but little beyond the anterior pair of ambulacral petals. This rudimentary fasciole in *Lovenia* is interesting as showing how easy it may be for closely allied genera to have what may seem a marginal fasciole, formed by the concentration at the ambitus of the miliary tubercles, especially if flanked above and below by coarser tubercles; in fact, the whole anterior part of the test of *Lovenia* may be said to a certain extent to be covered by a gigantic fasciole, highly specialised in a part of the test to form an internal fasciole, and a short rudimentary marginal or lateral fasciole extending a short distance along the ambitus; while in *Breynia* the structure of the anterior part of the test