ABERRANT *PANDANOCRINUS*, EARLY DEVONIAN CRINOID FROM NORTH QUEENSLAND. *Memoirs of the Queensland* Museum *43(1): 351. 1999:-* *Pandanocrinus martinswellensis* Jell et al., 1988 was described from the Early Devonian (Pragian; *sulcatus* Biozone) Martins Well Limestone Member of the Shiels Creek Formation at Martins Well on Pandanus Creek Station, north Queensland. Collections from the type locality in the University of Queensland (UQL3579) and the Queensland Museum (QML550) include several hundred individuals with uniform plate arrangement except for QMF25736, which has 7 plates in the radial circlet and a small triangular plate at the D-E interray between basal and radial circlets.

BB 3, equal, 2 with 3 sides against RR, 3rd with 4 or 5. BB circlet 7-sided; sides are not even either in length or in angle of meeting. Orientation is difficult because free arms and most of the upper theca are missing, only a few fixed brachials and interbrachials preserved. 7-sided anal plate bisected by diameter with one of the interplate sutures in the basal circlet indicating A ray-CD interray line of symmetry. Other interplate basal circlet sutures in C & D rays; in normal specimens the sutures are in the A, C and E rays (Jell et al., 1988). With this orientation (Fig. 1B) A, B and C rays appear normal although the upper margin of the B radial is not symmetrical. D & E rays are irregular in plate arrangement and shape. D & E radials appear to be divided, each into 2 plates of comparable size; thus the 7 radials. Between adjacent D and E radials (i.e. 1 from each pair) and resting on the basal circlet is a small triangular plate which has no homologue in other crinoids. If the D radial is correctly interpreted as being 2 plates then the anal is not in contact with the C radial as in normal specimens. Moreover, there appear to be 2 plates in the CD interray in the 1st brachial circlet; thus producing a circlet of 11 rather than the normal 10 plates. Apart from the more numerous plates the shapes of most posterior plates from the C to E rays are irregular. This is clearly a unique specimen. The most obvious explanation involves traumatic injury as a juvenile; growth centres of several plates were fragmented and 2 plates grew where formerly there had been 1. In radials, division was fairly equal whereas the small triangular plate must have had only a tiny piece of growth centre to start it off. Alternative explanations could involve a growth response to a constricted growth position (e.g., in a crevice or, given the number of fossils at the site, in a tightly packed meadow of large crinoids) or a single mutation. The chance of 1 mutation dividing 4 or more growth centres is remote and dismissed here. The influence of the surroundings could affect overall shape and symmetry but is unlikely to have induced growth of entirely separate plates.

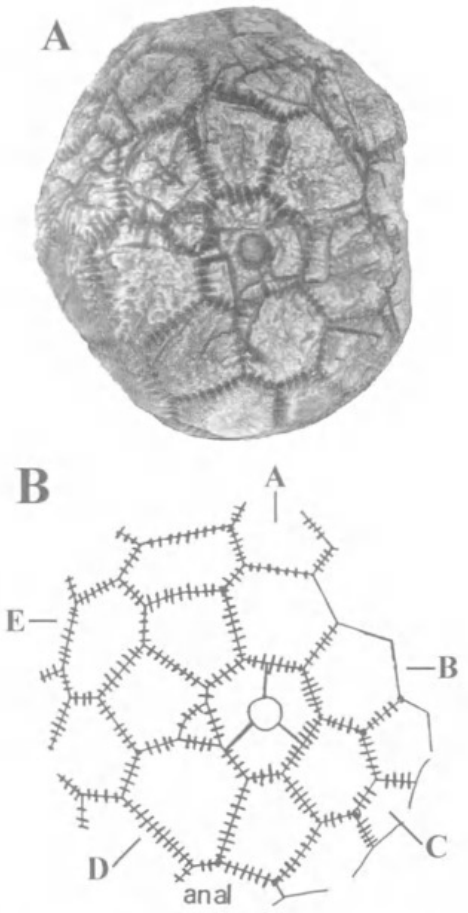

FIG. 1. *Pandanocrinus martinswellensis* Jell et al., 1988. A, basal view of aberrant theca QMF25736, ×1.5. B, plate diagram of QMF25736.

Literature Cited

JELL, P.A., JELL, J.S., JOHNSON, B.D., MAWSON, R. & TALENT, J.A. 1988. Crinoids from Devonian limestones of eastern Australia. Memoirs of the Queensland Museum 25(2): 355-402.

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