mens; their exposure, however, for a short time, renders them soft and chalky, and they soon moulder away. They occur at these localities, associated with the fossils common to the Carboniferous Limestone of the West of Scotland.

The only notice of these interesting remains is contained in the Report on the Geology of the Counties of Tyrone and Londonderry, where two are figured and described by the late General Portlock, as probably connected with the masticatory organs of *Dithyrocaris*, with the remains of which they are stated to have been found. As Portlock had shrewdly suspected, this has proved to be the case, and Mr. James Bennie, a zealous member of our Society, has been fortunate enough to find a carapace at Lickprivick Quarry, East Kilbride, containing two of the teeth *in situ* upon its under surface.

It is impossible at present to say to which species of *Dithyrocaris* we are to refer the detached teeth. The locality at Campsie and the shale at Orchard, both famous for the fine state of preservation in which the fossils from these localities are found, have hitherto yielded no trace of a carapace; and the bed at Carluke, so rich in specimens of this carboniferous crustacean, as to be known as the "*Dithyrocaris* bed," although searched for fossils by Dr. Rankin for upwards of thirty years, has not yielded any specimens of the teeth.

Owing to Mr. Bennie's specimen being somewhat imperfect, we have not been able to determine accurately to which species it belongs; but, judging from what remains of the external markings, it may possibly be the *D. Scouleri*, M'Coy.

Dithyrocaris ranges from the lower to the uppermost beds of the Carboniferous Limestone of Lanarkshire.

XLII. DESCRIPTION of two new species of SHELLS from the CARBONIFEROUS LIMESTONE of CLYDESDALE. By Mr. JAMES ARMSTRONG.

Exhibited at Meeting, March 16, 1865.

NAUTILUS (*Discites*) NODIFERUS, SP. NOV. PL. 1, FIGS. 6, 7.

N. testá discoidali; anfractibus tribus, contiguis, subquadratis, regulariter tuberculatis; umbilico aperto; dorso lato, in medio valde sulcato; superficie lineis undatis; septis multis, cum siphunculo in medio.

Shell discoidal, composed of about three gradually enlarging, contiguous, nearly subquadrate whorls, completely exposed in a

moderately shallow umbilicus; back broad, rounded at the edges, and traversed in the middle by a wide and deep channel, on the sloping sides of which are two fine thread-like ridges. The remainder of the space on the back and sides of the shell is occupied by six rows of closely set, prominent, obtuse tubercles, elongated in the direction of the aperture, one row of tubercles of large size bounding the back, a double row of equal size between it and the channel, and three on the sides, which decrease in size towards the umbilicus. Surface marked with coarse, squamose, wavy lines of growth which are arched backwards in the dorsal channel. Septa numerous, their edges arched considerably backwards on the periphery, and slightly so at the sides. Siphuncle $\frac{1}{2}$ inch diameter, central. Dimensions,—width of greatest diameter $3\frac{1}{4}$ inches, width of outer whorl near the aperture 1 inch.

Locality.—This elegant *Nautilus*, which belongs to the section *Discites* of Professor M'Coy, is an *index* shell to the upper division of the Carboniferous Limestone series of Clydesdale, to which group it would appear to be restricted, no specimens having been observed in any of the lower beds. Good external casts are not unfrequently obtained in the limestones of Castlecary, Arden, and Garnkirk; while one or two entire specimens with the shell preserved have been found in the shale at Gare, near Carluke. At this locality, as well as at the adjoining old workings at Westerhouse, pieces are common which often exhibit the siphuncle, and the beautiful shell markings.

PLEUROTOMARIA YOUNGIANA, SP. NOV. PL. 1, FIG. 8.

P. testâ conicâ; anfractibus subconcavis; apice truncatâ; suturis perspicuis; carinâ rotundatâ; superficie lineis obliquis inconspicuis.

Shell conical, composed of 5-6 slightly concave whorls, which terminate in a blunt apex with the tip depressed; sutures well defined, band rounded, situated on the lower edge of the whorls. Surface marked with faint, oblique lines of growth; base flat and sloping towards the umbilicus. Dimensions—height 11 lines, width of base nine lines.

Locality.—In shale, lower Carboniferous Limestone, Craigenglen. The specimen from which the above description is taken is in the Society's collection. We are acquainted with only this single example, which we have pleasure in dedicating to our friend, Mr. John Young, Hunterian Museum, Glasgow.