assumes an oval form, and the ten markings on its edge first become arranged into two groups of five each (fig. 5), and then finally disappear (fig. 6). This is due to the five ligamentous bundles mentioned above as being attached to the basals, becoming gradually replaced by the two larger and somewhat crescentic bundles which unite the joints lower down the stem. The articular rim eventually becomes restricted to a broad ridge which occupies the short axis of the oval oblong face, and is pierced in the centre by the oval opening of the central canal (figs. 7, 8). In the slender joints of the upper third of the stem (fig. 7) this ridge takes up the greater part of the articular surface, and there is merely a shallow fossa on either side of it. As the joints increase in stoutness the ridge becomes relatively narrower, and the lateral fossæ proportionately larger (figs. 8, 9). They are shallowest at the edge, and gradually deepen as they approach the ridge. When the joints begin to shorten again but continue to increase in stoutness, their terminal faces become more circular (fig. 10), though the planes of the articular ridges at the two ends of each joint still continue to cross one another. The ridges themselves still diminish in relative width, and become somewhat constricted in the middle, until there is only a very narrow rim around the opening of the central canal (figs. 9, 10). Lower down the stem this rim disappears altogether (Pl. VII. figs. 12, 13; Pl. VIIa. fig. 11), so that the two lateral fossæ communicate around the central opening just as in *Rhizocrinus* (Pl. X. figs. 11–14).

The joint-faces also become oval again, and the articular ridges now occupy their longer axis (Pl. VIIa. fig. 11) instead of the shorter ones, as is the case at the top of the stem (figs. 7–9). The two halves of each ridge which are separated by the opening of the central canal are of an elongated triangular shape, and relatively narrower than in *Rhizocrinus rawsoni*, owing to the greater size of the lateral fossæ. Each is denticulate along its median line, as in the other Bourgueticrinidæ.

The distinction of the lower stem-joints of *Rhizocrinus* and *Bathycrinus* thus becomes a matter of some difficulty, though those of the upper and middle parts of the stem are very different in their characters.

In the young individuals of both genera most of the stem-joints are simple, more or less elongated cylinders; and the characteristic dice-box shape is only visible in a few joints immediately above the root (Pl. VIIIa. figs. 2, 3; Pl. LIII. figs. 7, 8; woodcut, fig. 16, p. 244).

The lower part of the stem in the Bourgueticrinidæ may bear a large number of irregularly branched radicular cirri, two or more proceeding from each joint near the end of the long axis of one face (Pl. IX. fig. 1; Pl. X. figs. 13, 15); while the main axis may eventually break up into a similar set of branching rootlets. These two forms of roots may coexist in the same individual, or either may occur alone. In some specimens of *Rhizocrinus lofotensis* the radicular cirri are exceedingly abundant. Thus in an indivi-