constriction before its junction with the posttergite, but without a sharp rim or margin bounding the articulating portion of the helcium; nor is there a post-helcial neck. Helcial sternite large and strongly convex (Figs 7, 9), clearly visible in profile and bulging strongly ventrad in frontal view (Fig. 7); easily seen in normally mounted specimens. Tergosternal fusion complete, the suture more or less straight to the base of the helcial tergite. Posttergite and sternite approximately equal in size or the former slightly larger than the latter. Spiracle clearly visible on posttergite, close to helcium. Sternite anteriorly concave, with a thickened U- or V-shaped rim below the helcium, which may project as a shallow lip-like process in profile. Maximum depth of segment occurring at or close to its posterior margin.

Abdominal segment 4 (Fig. 7). Pretergite and presternite large, convex in outline, the suture between them visible. A strong girdling constriction separates pre- from postsclerites. Spiracle visible, situated anteriorly on side of posttergite. Posttergite and poststernite about the same size in profile, the postsclerites together larger than those of segment 3. Tergite and sternite not fused.

Abdominal segments 5–7 (Fig. 7). Either presclerites not strongly differentiated from postsclerites (i.e. differentiated only by lack of pilosity and weaker sculpture on the former), or pre- and posttergites, pre- and poststernites, or both, separated by weak transverse constrictions or impressions. All spiracles on posttergites, visible. Tergite 7 (pygidium) large and flattened dorsally, the flattened portion armed laterally with weak denticles or teeth. Sternite 7 (hypopygium) downcurved between pre- and poststernite.

Cylindromyrmex: three species examined (one dissected).

Cerapachyini (*Cerapachys, Simopone, Sphinctomyrmex, Leptanilloides*)
(Figs 1–3, 10–23)

Abdominal segment 2 (petiole) (Figs 2, 3, 10, 12, 14, 16). Proprioceptor zone present and usually conspicuous on sternite anteroventrally, in front of the subpetiolar process. Laterotergite sometimes present and discrete, but showing all grades of fusion with the tergite. Posterior foramen of segment 2, where helcium inserts, relatively narrow (Figs 2, 12, 16). Tergite with a short to deep posterior face, most frequently the former (Figs 3, 10, 14). Sternite in ventral view simple at apex and rounded, the sides roughly parallel or converging or diverging slightly posteriorly (Figs 2, 12, 16).

Abdominal segment 3 (Figs 1–3, 10, 11, 13–15, 17–23). Helcium at maximum development broad and deep, almost as broad as anterior width of posttergite in dorsal view; reducing in size from this, in several lines, until its width is less than half that of the anterior posttergal margin. Helcium usually located approximately at midheight on anterior face of segment (Figs 1, 11, 13, 15, 18–23), its dorsum well below the level of the posttergal dorsum and the latter with a short to moderate anterior declivity. Flattening and sloping of the posttergal dorsum may obliterate the anterior declivity in some *Cerapachys*, and bring the helcium, secondarily, to a relatively high point of attachment (Fig. 17). Helcium distinctly narrowed posteriorly, with a deep constriction before its junction with the posttergite. In some species a sharp rim or margin bounds the articulatory portion of the helcium, and a post-helcial neck may be developed in some *Cerapachys* (Figs 15, 20, 21), *Simopone*, *Leptanilloides* (Figs 22, 23) and *Sphinctomyrmex* (Fig. 11). Helcial sternite large and strongly convex, clearly visible in profile and bulging ventrad in frontal view (Figs 1, 11, 13, 15); easily seen in normally mounted specimens. Tergosternal fusion complete, the suture stright or feebly arched. Postsclerites approximately equal in size in profile, or the posttergite slightly larger than the