

FIGURE 11—1-4, Holmiella falx n. sp., from the shale unit in the lower member of the Poleta Formation, east of Mount Jackson, locality 1721; 1, latex cast of cephalon, left part with arched genal spine, USNM 520998, ×4; 2, latex cast of late-stage meraspid cephalon, USNM 521000, ×7; 3, latex cast of holotype cephalon with right genal spine displaced, USNM 521001, ×1; and 4, latex cast of cephalon, USNM 520999, ×4. 5–8, Esmeraldina elliptica n. sp., Montenegro Member of the Campito Formation, Montezuma Range; 5, partial cephalon, USNM 520980, section MN-h 246.5, ×2; 6, cephalon showing small occipital node, USNM 520979, section MN-h 246.5, ×3; 7, latex cast of small, external mold, ICS 3758, section MN-f 199, ×5; and 8, holotype, relatively complete exoskeleton, thorax somewhat jumbled, USNM 520981, section MN-h 193, ×2.

ESMERALDINA ELLIPTICA new species Figures 10.4, 11.5–11.8

Diagnosis.—Cephalon with strongly advanced genal spines, and a small node on L0. Thorax narrow, widest at T5.

Description.—Cephalon broadly elliptical, width varies from 1.5 to over 2.0 times cephalic length. Genal spines long, broadbased, advanced, lateral margin smoothly following the alignment of the lateral border, gently curving adaxially near posterior tip; length 1.0 to more than 1.5 times cephalic length. Posterior cephalic margin transverse to intergenal angle then strongly directed forward. Intergenal angle located slightly distal to exsagittal margin of ocular lobe, about one-third length of posterior margin from L0 to genal angle; marked by node or small spine angled outward. Genal angle approximately opposite L2. Anterior border cross section convex (sag.); length (sag.) about equal to length (sag.) of L0; becomes broad and flat toward genal angle. Posterior border narrower by half than anterior border. Border furrow broad, continuous to L0, strongly curved, deepest parallel to anterior margin. Glabella extended to anterior border furrow, width at LA approximately two-thirds length of glabella and wider (tr.) than L0 by one-sixth, sides slightly concave. Preglabellar field absent. Axial furrow well defined adjacent to L0 and lateral margins of LA to S2; weakly developed or absent adjacent to L1. LA no more elevated dorsally than rest of glabella, length (sag.) about one-third length of glabella. S1, S2, S3 distinct distally, not connected across glabella; S1 and S2 nearly straight, S3 distinctly arced forward. S0 deepest distally, shallow to barely apparent across axis. L0 longest on axial line, bears distinct axial node at posterior margin; node largest on smaller cephala. Ocular lobes distinctly separated from LA by axial furrow, uniformly curved, slightly divergent posteriorly; posterior tip opposite L1, distance (tr.) from posterior tip to axial furrow about one-fourth glabellar width at L0; inner margin weakly differentiated from interocular cheek. Width of cephalon between distal margins of ocular lobes approximately the same as glabellar length. Extraocular area slightly more than twice width (tr.) of interocular area, with distinct rolled elevation close to and paralleling margin of ocular lobe. External surface finely and irregularly granular. Thorax known from 17 segments observed on holotype, narrow, widest at T5 then tapering rapidly toward posterior. Axis narrow, about one-quarter thoracic width (tr.) at T5. Pleural spines thornlike with anterior margin about 50° to sagittal axis. Pygidium and hypostome unknown.

Etymology.—Greek, elleiptikos, elliptical, for the elliptical shape of the cephalon.

Types.—Holotype, half of nearly complete exoskeleton USNM 520981, and paratypes from Montenegro Member of the Campito Formation in the northern Montezuma Range, Nevada.