

PLATE 39. *Errina gracilis* (a, b, f, g, *Eltanin* 1975, USNM 60167; c-e, lectotype, *Belgica* 387, USNM 78874): a, large colony, x 1.2; b, branch tip illustrating dactylopore spines, gastropore, and coenosteal texture, x 39, stereo pair; c-e, branch segments illustrating dactylopore spines, lipped gastropore, and ampullae, x 47, x 19, x 65, respectively; f, reticulate-granular coenosteal texture, x 140; g, gastrostyle, x 175, stereo pair.

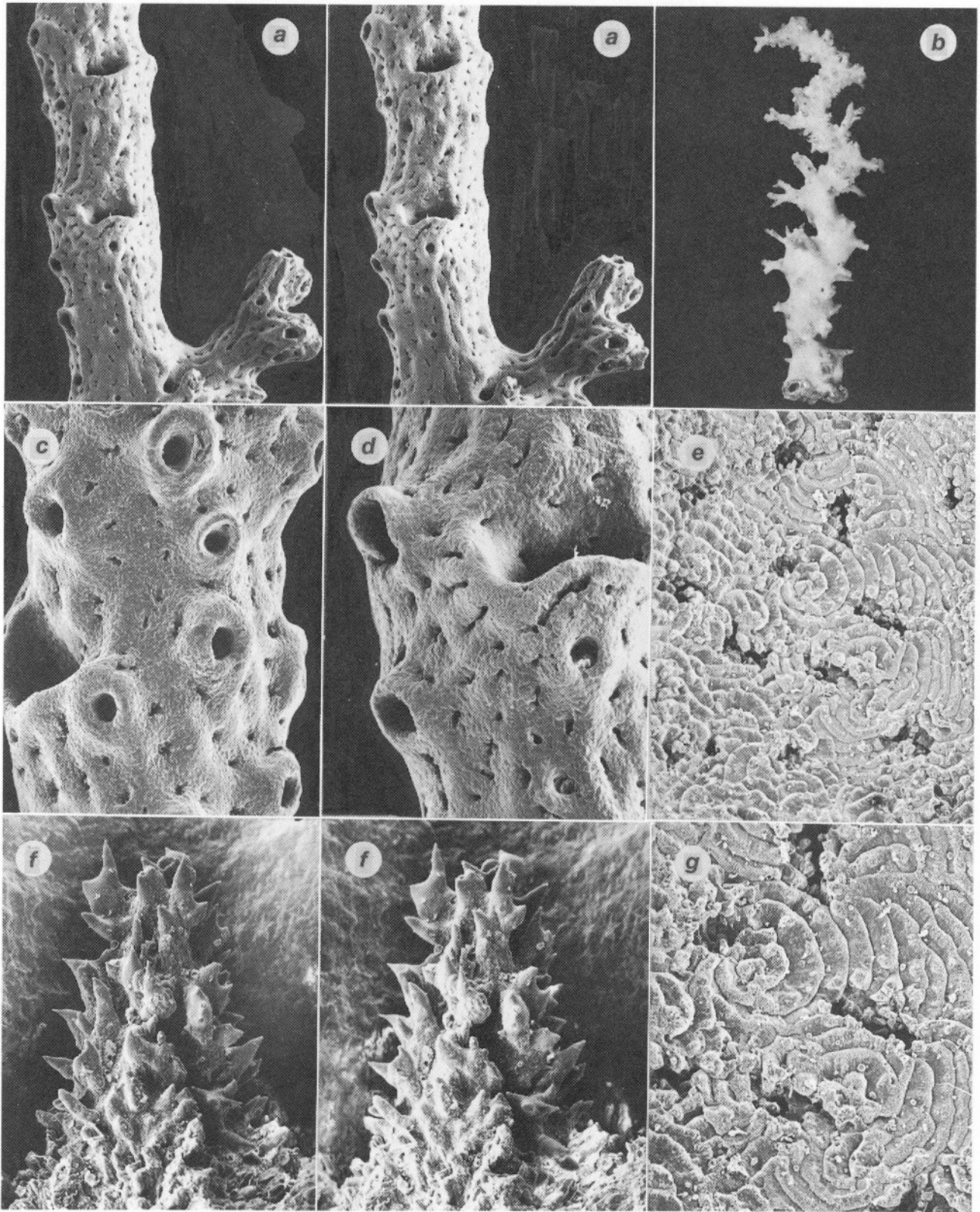


PLATE 40. *Errina sinuosa* (a, d-g, K842, USNM 85132; b, holotype, K842): a, c, d, branch segments illustrating aligned dactylopore spines and lipped gastropores, x 28, x 77, x 90, respectively (a is a stereo pair); b, holotype colony, x 1.8; e, g, radial-imbricate coenosteal texture, x 190, x 310, respectively; f, gastrostyle, x 430, stereo pair.

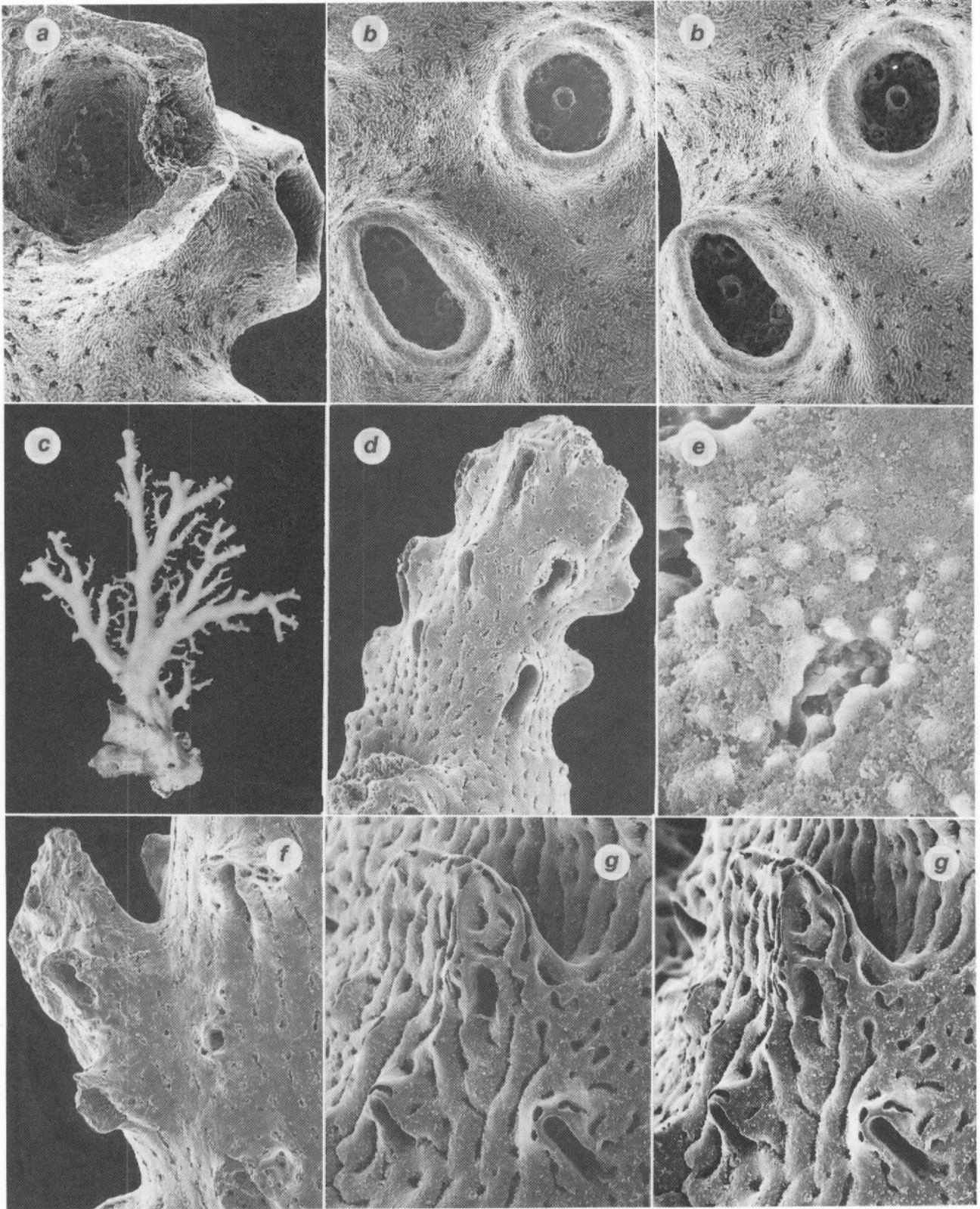


PLATE 41. *Errina sinuosa* (a, b, K842, USNM 85131): a, b, longitudinal section and apical view of male (?) ampullae, x 66, x 63.5 (b is a stereo pair). *Errina cheilopora* (c, S30, NZOI; d, e, *Eltanin* 1975, USNM 60076; f, E803, USNM 85134; g, D176, USNM 85133): c, large colony, x 0.83; d, branch tip bearing dactylopore spines, x 60; e, reticulate-granular coenosteal texture, x 800; f, g, broad gastropore lip bearing dactylopore spines, x 67, x 90, respectively (g is a stereo pair).

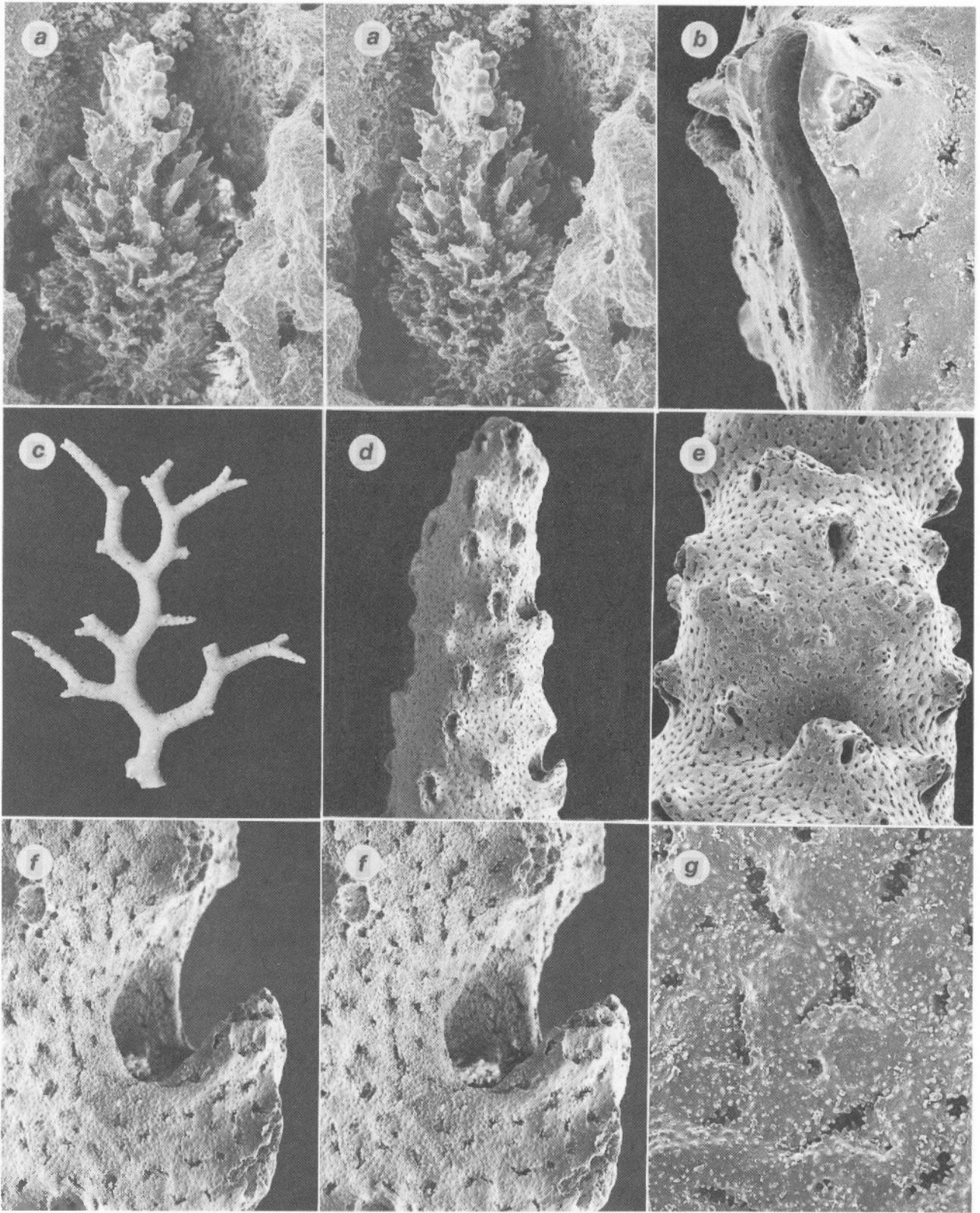


PLATE 42. *Errina cheilopora* (a, D176, USNM 85133; b, E803, USNM 85134): a, gastrostyle, x 215, stereo pair; b, dactylopore spine, x 185. *Errina bicolor* (c, holotype, D172; d-f, D172, NZOI; g, B175, USNM 60250): c, holotype colony, x 2.0; d, branch tip, x 21; e, branch segment illustrating dactylopore spines and lipped gastropore, x 39; f, gastropore lip, x 94, stereo pair; g, reticulate-granular coenosteal texture, x 265.

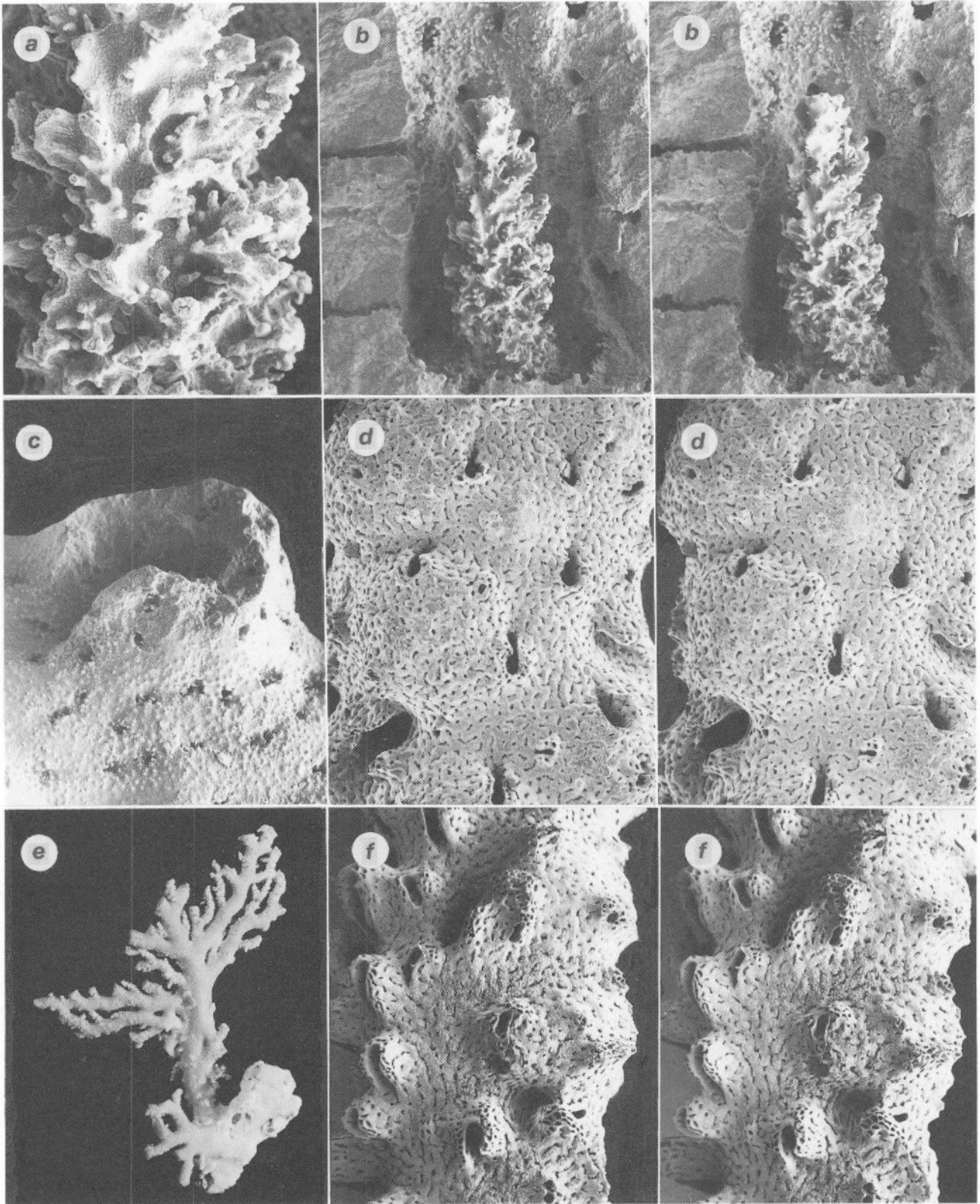


PLATE 43. *Errina bicolor* (a–c, D172, USNM 60249; d, B175, USNM 60250): a, b, gastrostyle, x 525, x 185, respectively (b is a stereo pair); c, dactylopore spine, x 175; d, branch segment illustrating dactylopore spines and female ampullae, x 33, stereo pair. *Errina reticulata* (e, f, D18): e, holotype colony, x 0.95, NZOI; f, branch segment illustrating dactylopore spines, USNM 60247, x 40.5, stereo pair.

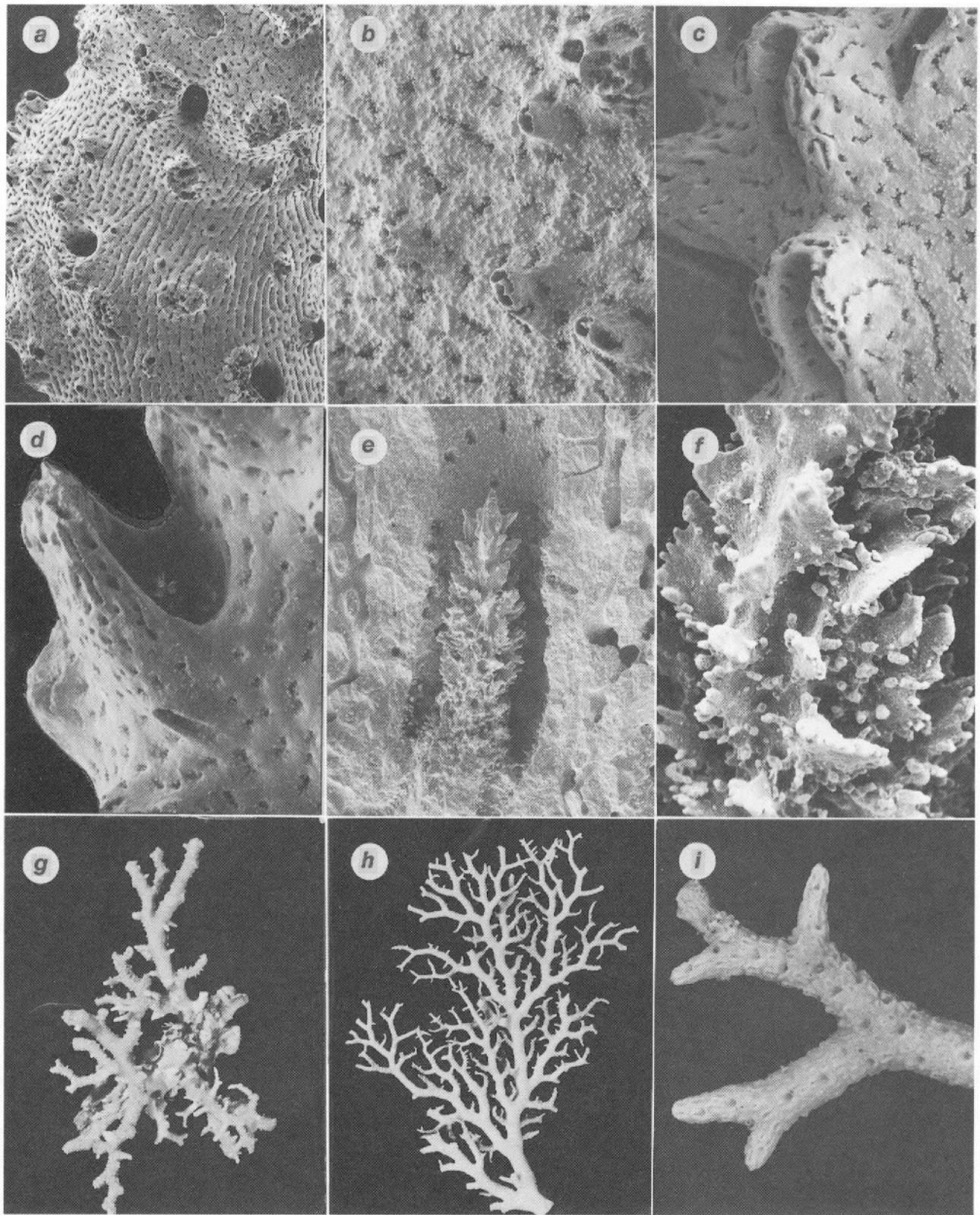


PLATE 44. *Errina reticulata* (a-f, D18, USNM 60247): a, branch segment illustrating coenosteal texture, gastropores, and dactylopore spines, x 29.5; b, coenosteal papillae, x 135; c, dactylopore spines, x 115; d, gastropore lip, x 110; e, f, gastrostyle, x 135, x 510, respectively. *Errina dendyi* (g, E865, NZOI; h, Gut Passage, USNM 76301; syntype of *E. rubra*, ZMC): g, orange colony, x 0.88; h, pale yellow colony, x 0.71; i, red colony, x 5.0.

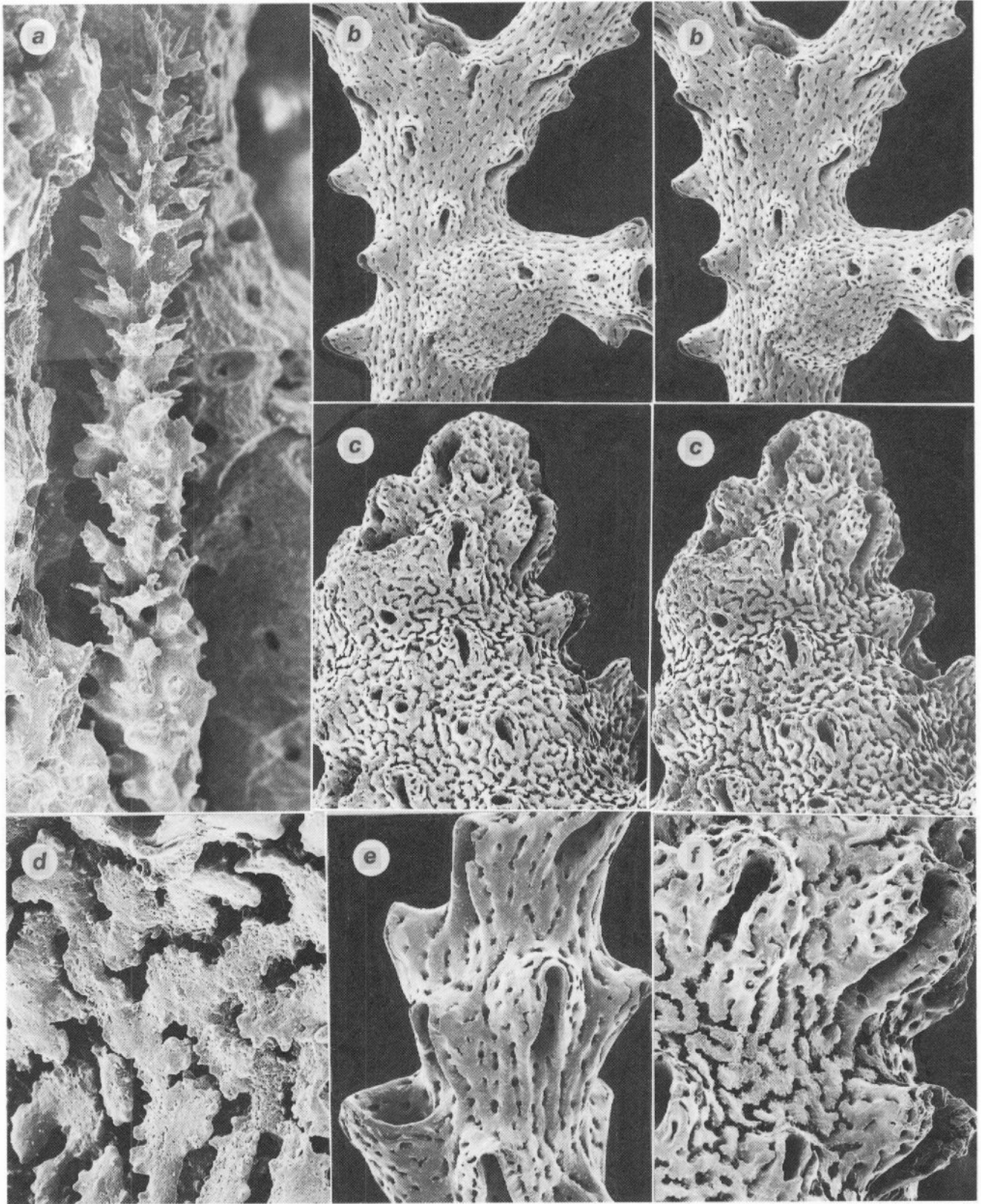


PLATE 45. *Errina dendyi* (a, b, e, Wet Jacket Arm, USNM 76302; c, d, f, Milford Sound, holotype, USNM 85784): a, gastrostyle, x 205; b, branch segment illustrating dactylopore spines and a female ampulla, x 32; c, branch tip, x 40.5; d, coenosteal texture, x 240; e, f, branch segment illustrating a lipped gastropore, dactylopore spines, and coenosteal texture, x 66, x 83, respectively.

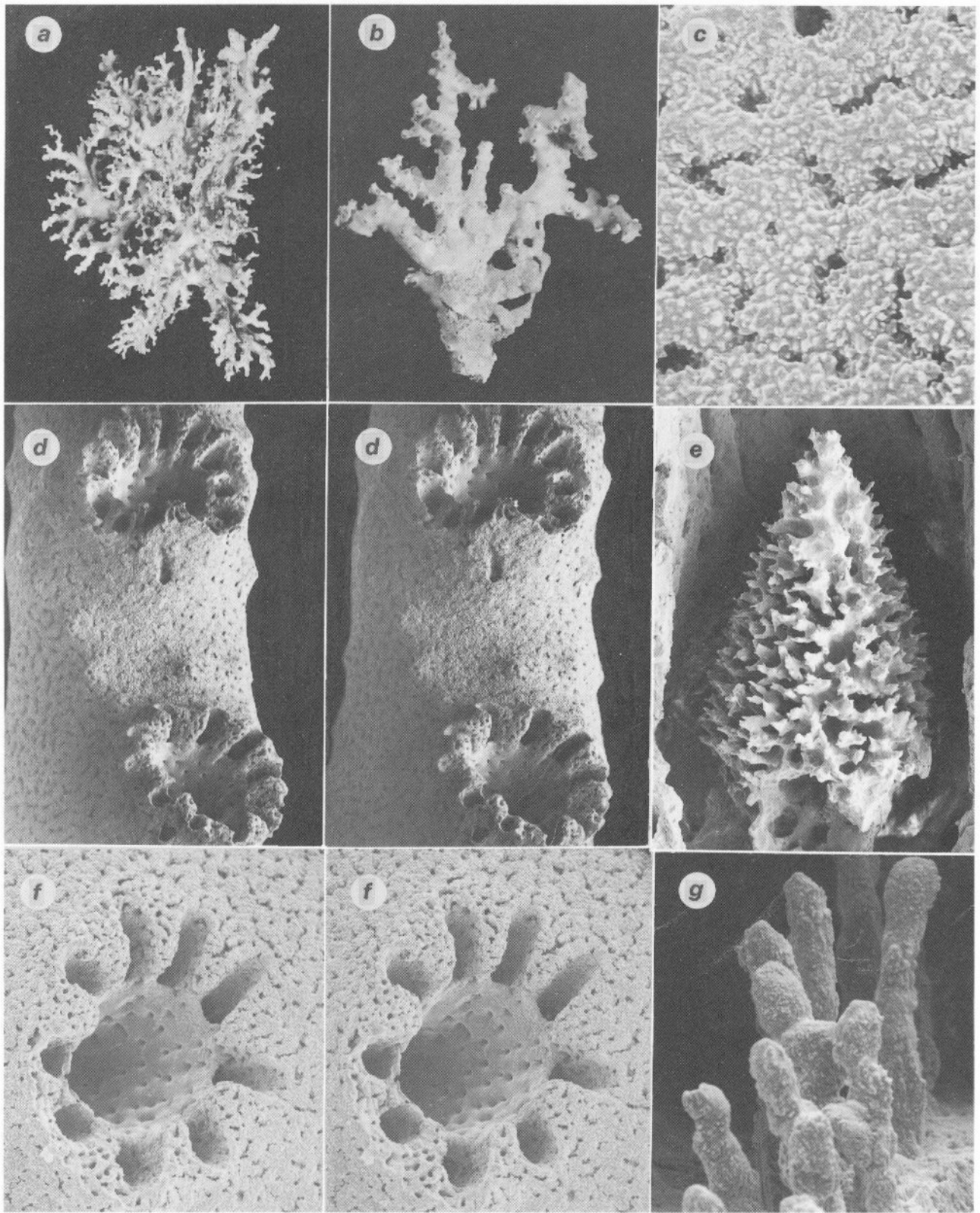


PLATE 46. *Stylaster eguchii* (a, Q749, USNM 86942; b, D39, NZOI; c, f, *Eltanin* 1411, USNM 60096; d, E822, USNM 86940; e, g, D18, NZOI): a, shallow-water bushy form, x 0.8; b, southern flabellate form, x 1.0; c, reticulate-granular coenosteal texture, x 190; d, branch segment illustrating two cyclostyles and several small conical male efferent pores, x 25, stereo pair; e, gastrostyle, x 125; f, cyclostyle, x 42, stereo pair; g, dactylostyle, x 175.



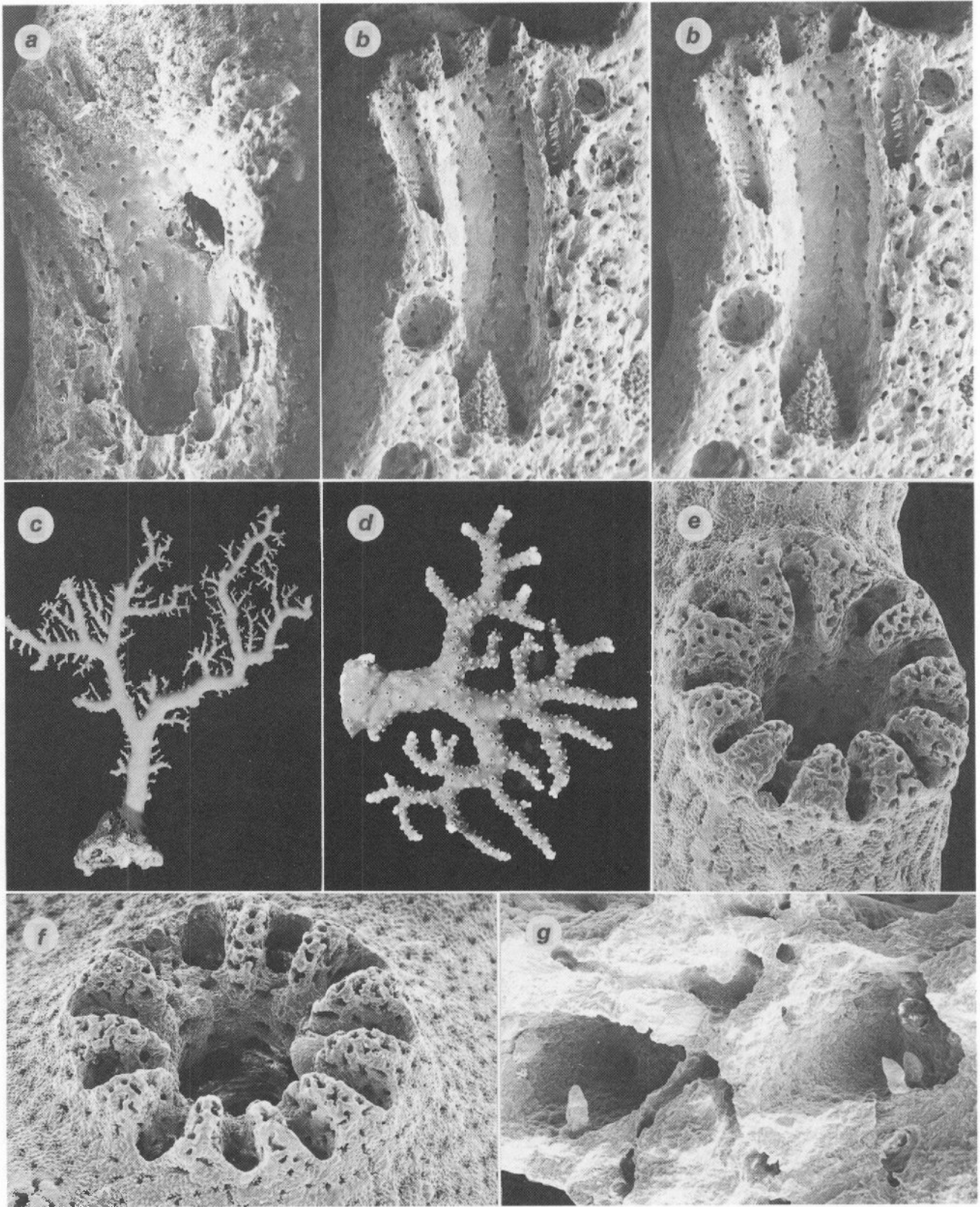


PLATE 47. *Stylaster eguchii* (a, B488, NZOI; b, D76, USNM 85143): a, longitudinal section of a gastropore tube illustrating female efferent pore in upper chamber, x 47; b, longitudinal section of a gastropore tube illustrating gastrostyle, dactylostyles, and internal male ampullae, x 30, stereo pair. *Stylaster brunneus* (c, I87, NZOI; d, Norfolk Island, WAM 551-87; e, f, P19, USNM 86945; g, I85, USNM 86943): c, large colony with sympodially arranged cyclostyles, x 0.38; d, colony with uniformly arranged cyclostyles, x 1.0; e, f, cyclostyles, x 64, x 80, respectively; g, rudimentary dactylostyles of deep-water specimen, x 260.

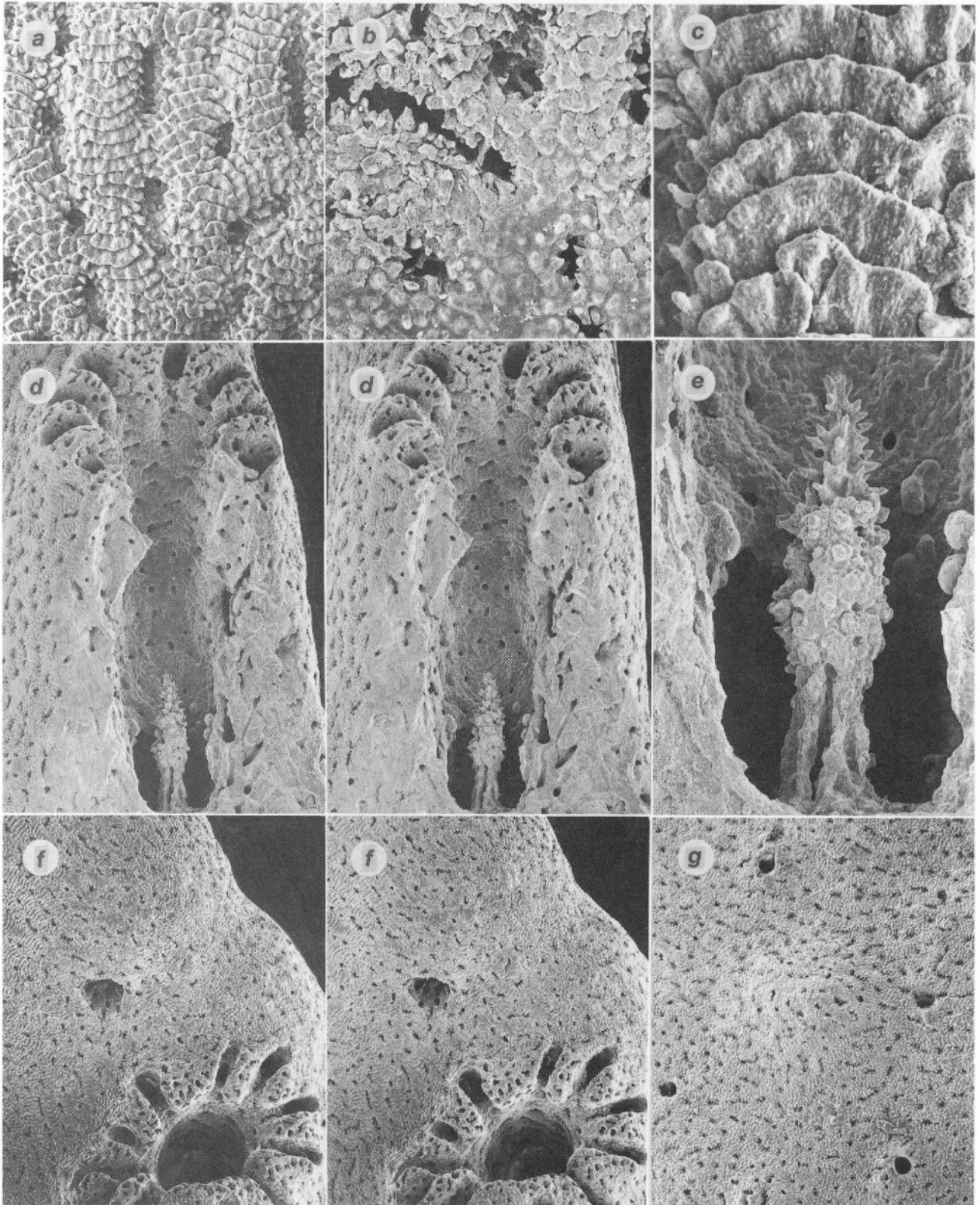


PLATE 48. *Stylander brunneus* (a, c, I85, USNM 86943; b, d, e, g, P19, USNM 86945; f, I87, NZOI): a, c, linear-imbricate coenosteal texture, x 205, x 825, respectively; b, transition between linear-imbricate and reticulate-granular coenosteal texture, x 315; d, e, longitudinal section of a gastropore tube illustrating gastrostyle and ring palisade, x 53.5, x 173, respectively (d is a stereo pair); f, cyclosystem and female ampulla with efferent pore, x 52.5, stereo pair; g, male efferent pores, x 52.5.

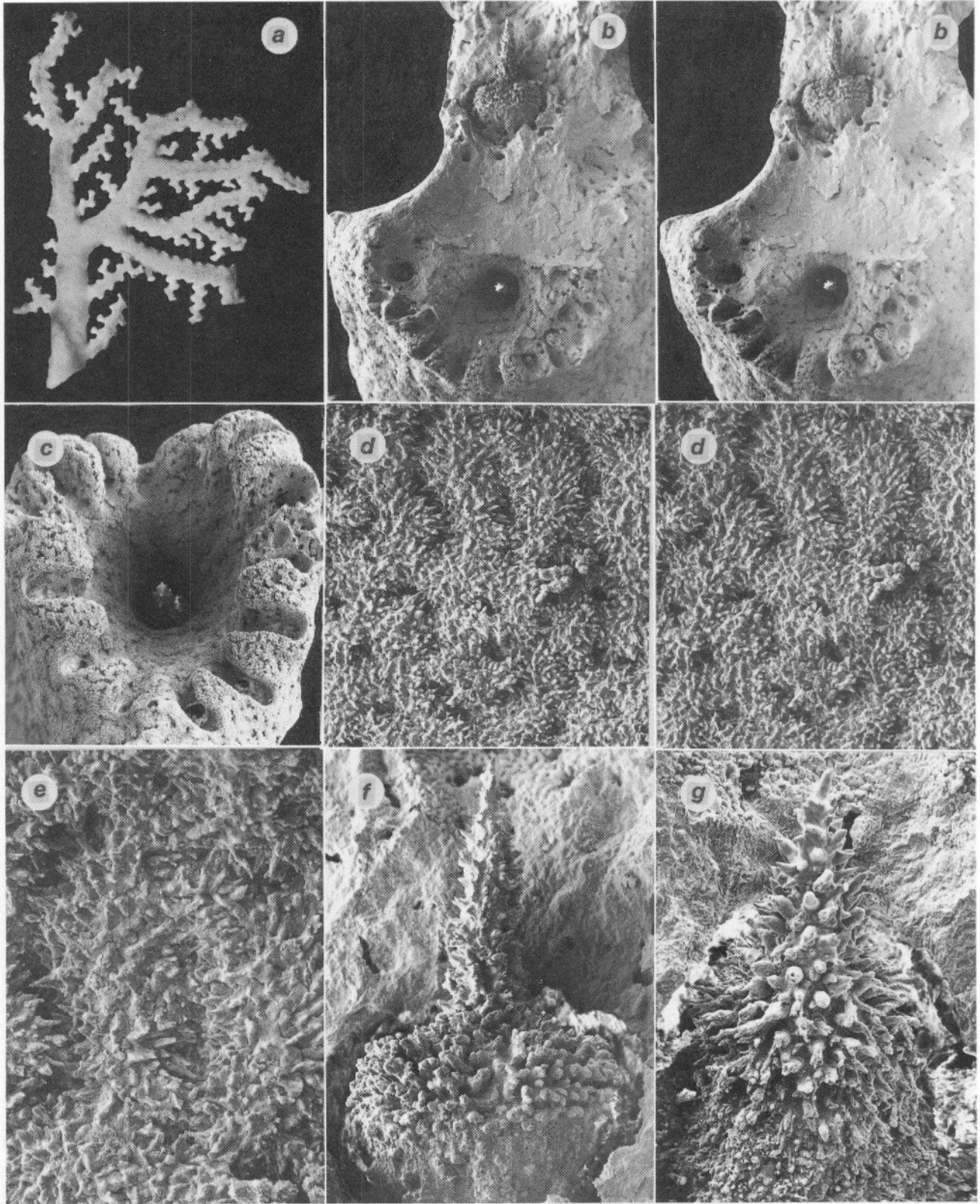


PLATE 49. *Stylaster horologium* (a–c, f, holotype, E 856; d, e, g, E845, NZOI): a, holotype colony, x 1.3; b, apical view of one cyclosystem with dactylostyles visible and lateral view of adjacent gastrostyle, x 33, stereo pair; c, cyclosystem, x 59; d, e, reticulate-granular coenosteal texture, x 180, x 360, respectively (d is a stereo pair); f, g, gastrostyles, x 130, x 210, respectively.

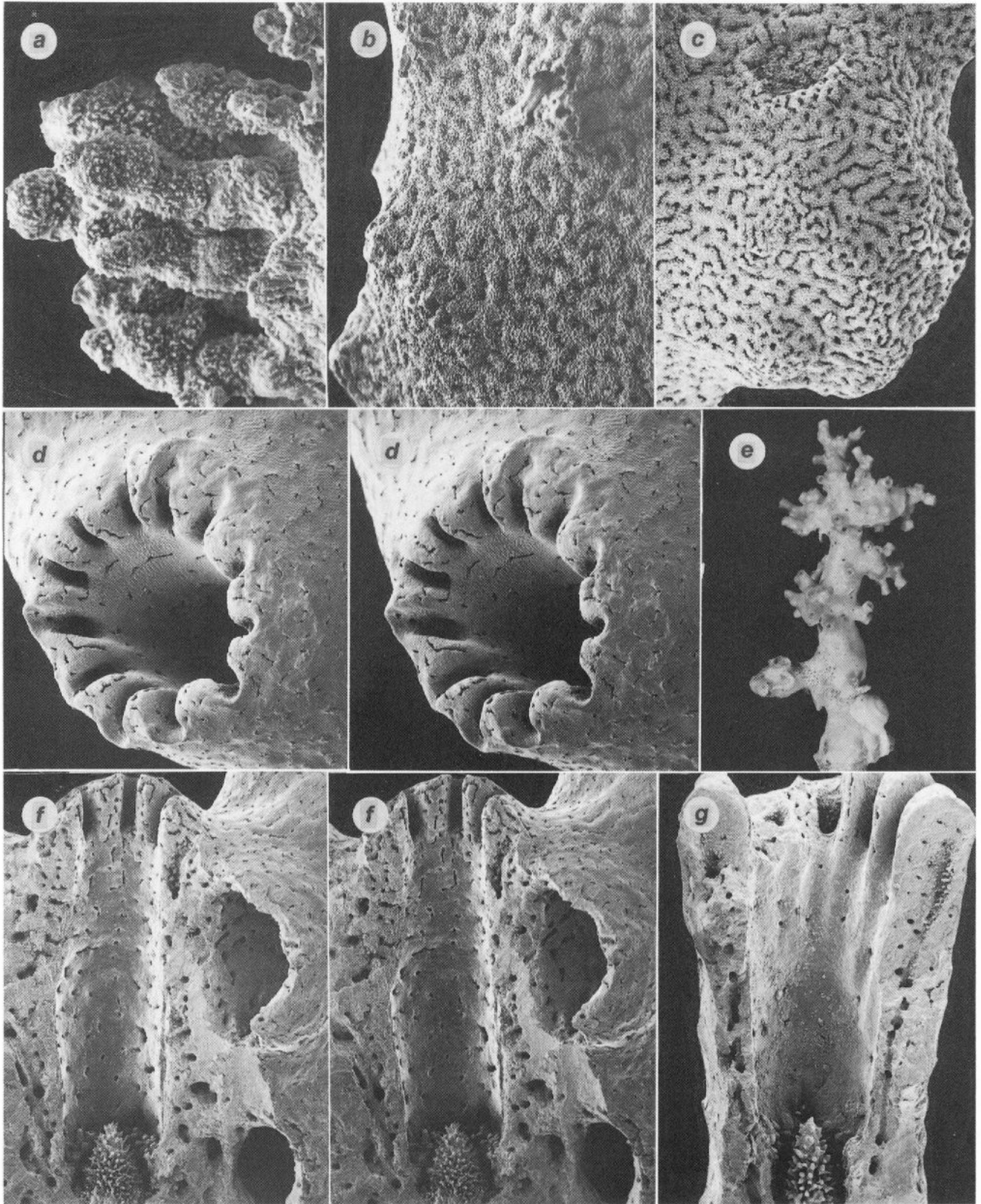


PLATE 50. *Stylaster horologium* (a, E856, USNM 87523; b, E845, NZOI; c, E846, USNM 87522): a, dactylostyle, x 840; b, male efferent pores, x 66; c, female ampulla with efferent pore, x 60. *Stylaster imbricatus* (d, S571, USNM 87526; e, f, E861, holotype; g, G941, USNM 87525): d, cyclosystem, x 41.5, stereo pair; e, holotype colony, x 1.55; f, longitudinal section of a gastropore tube illustrating gastrostyle, ring palisade, and a fractured female ampullae, x 37, stereo pair; g, longitudinal section of a gastropore tube illustrating gastrostyle, ring palisade, and dactylostyle, x 44.

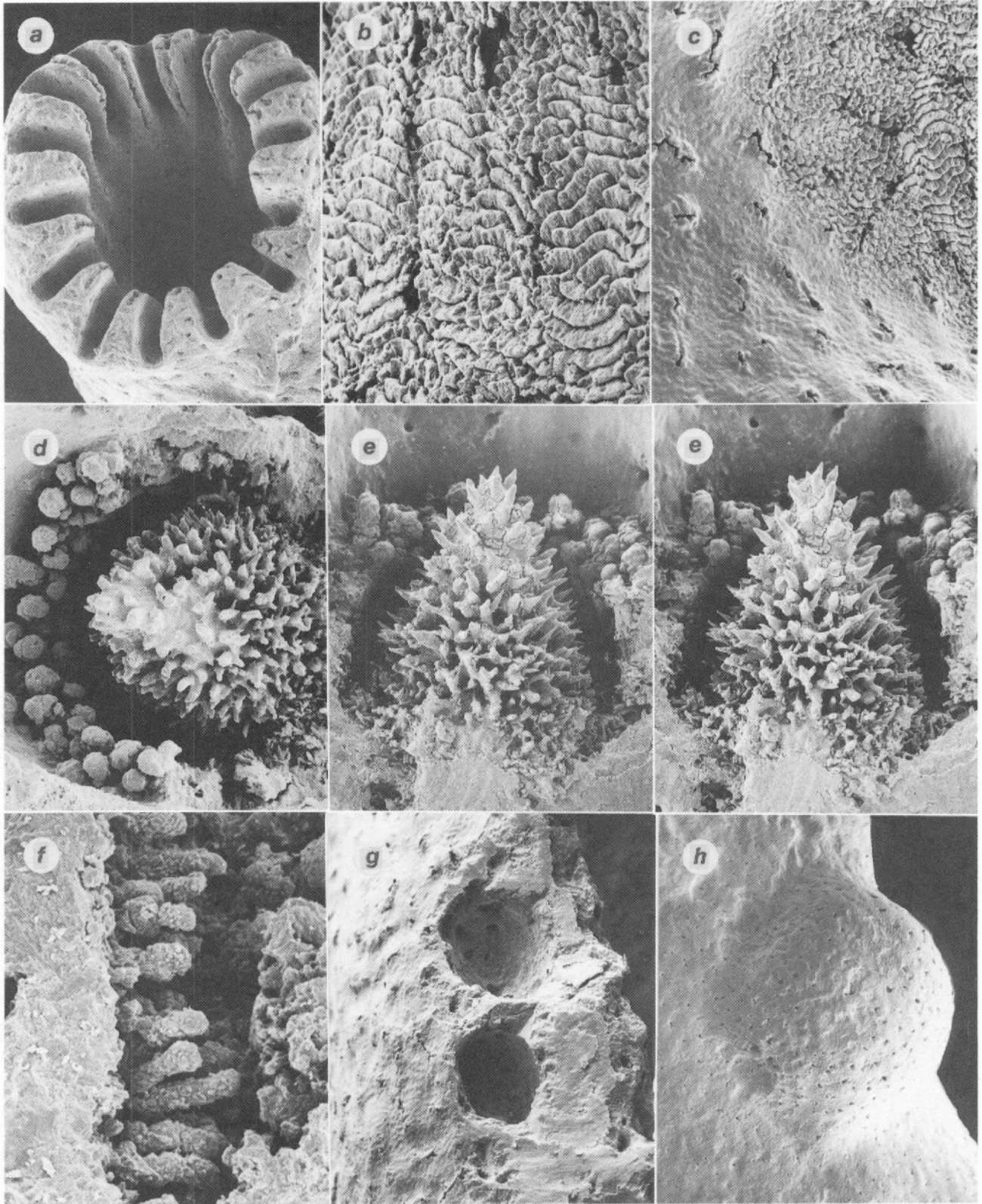


PLATE 51. *Styaster imbricatus* (a, G941, USNM 87525; b, c, S571, USNM 87526; d-f, E861, holotype; g, h, S572, USNM 87527): a, cyclosystem, x 45; b, imbricate coenosteal texture, x 240; c, transition between imbricate and granular coenosteal textures, x 120; d, e, gastrostyle and annular ring palisade, both x 125 (e is a stereo pair); f, dactylostyle, x 465; g, cross section of internal male ampullae that occur in worm tube coenosteum (surface to left), x 77.5; h, female ampulla and efferent pore, x 39.

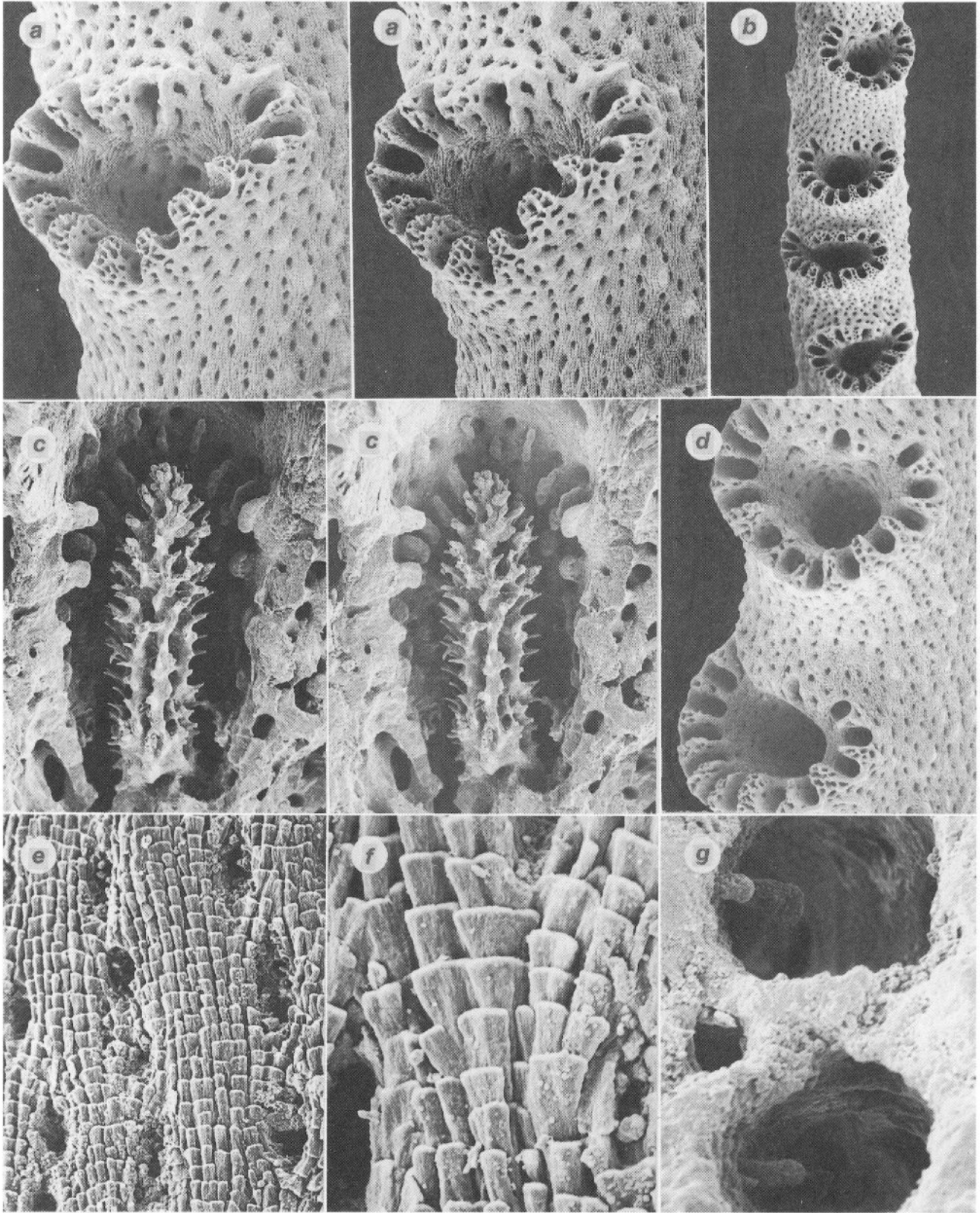


PLATE 52. *Stylaster gracilis* (a–g, Challenger 170, BM(NH) 1880.11.25.190, male): a, b, d, cyclostomes, x 65, x 22.5, x 53, respectively (b is a stereo pair); c, gastrostyle and ring palisade, x 143; e, f, imbricate coenosteal texture, x 340, x 960, respectively; g, two dactylostyles, x 510.

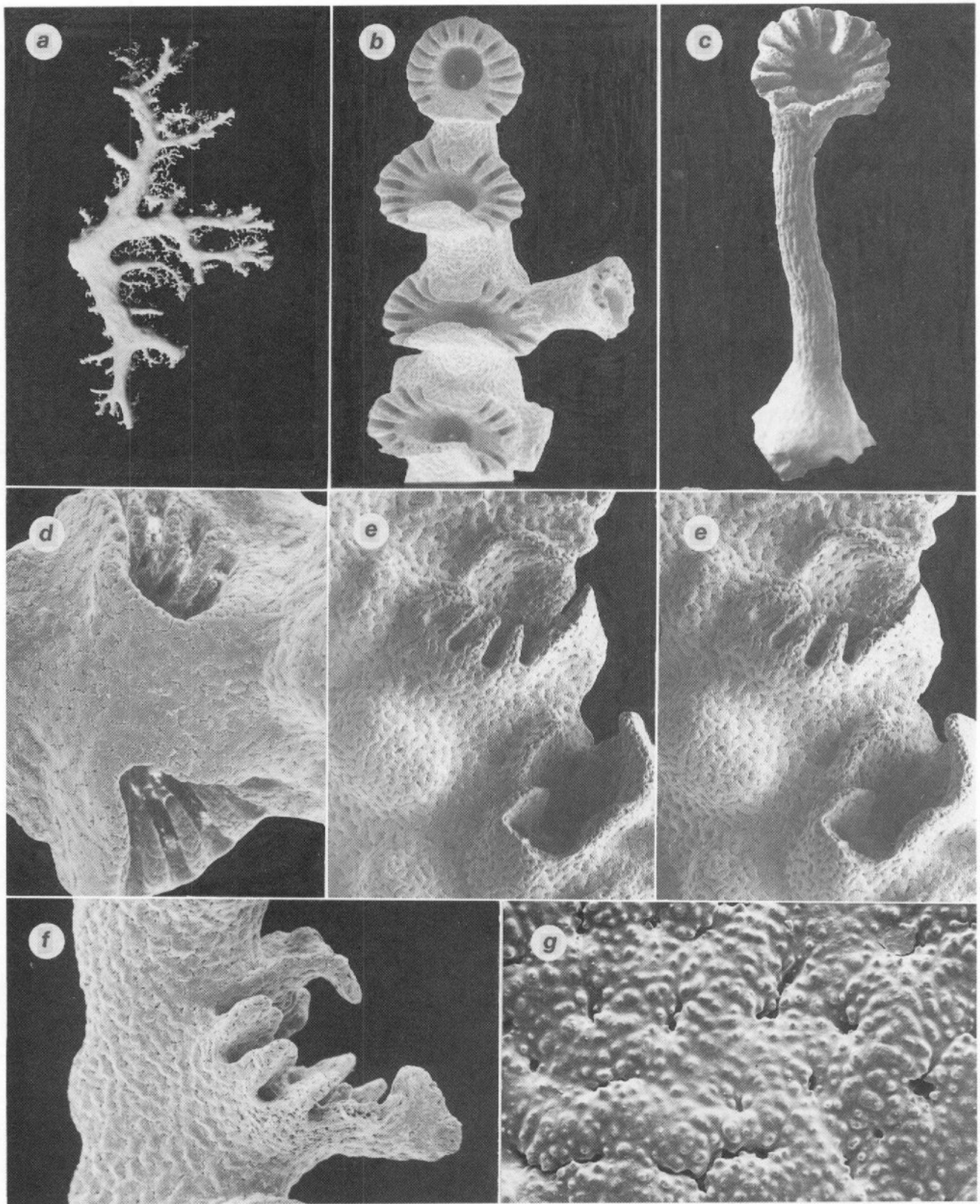


PLATE 53. *Calyptopora reticulata* (a, d, *Eltanin* 1851, USNM 60008; b, *Eltanin* 1991, USNM 60010; c, G3, NZOI; e, g, F132, USNM 76878; f, *Eltanin* 2143, USNM 60009): a, large colony, x 0.35; b, unifacial cyclosystems having progressively more developed lids, x 16; c, founder cyclosystem, x 23.5; d, cyclosystem with fused opposing lids, x 45.5; e, two cyclosystems and male ampullae, x 28, stereo pair; f, lateral view of a cyclosystem with well-developed opposing lids, x 33.5; g, reticulate-granular coenosteal texture, x 220.

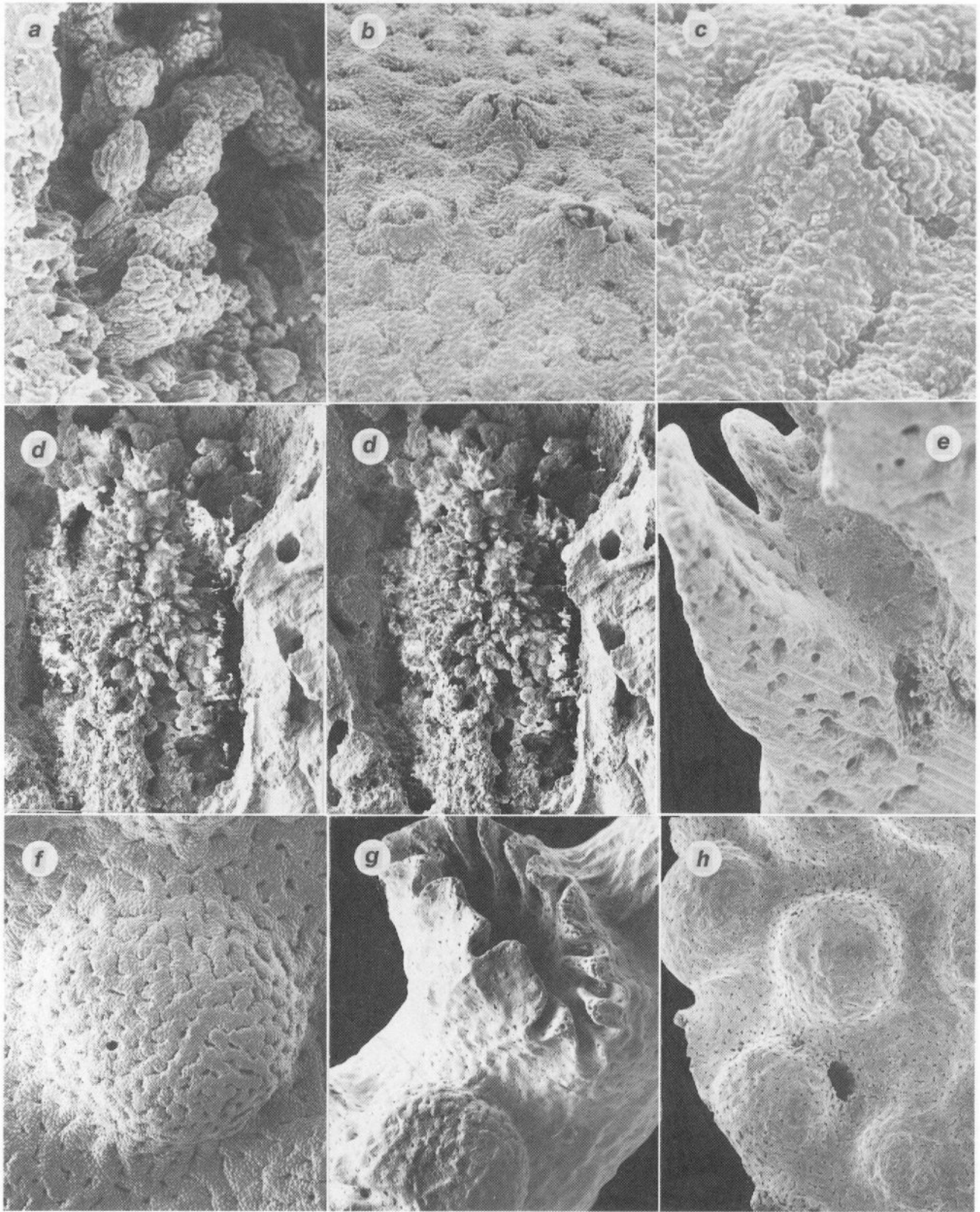


PLATE 54. *Calyptopora reticulata* (a, d, f, F132, USNM 76878; b, c, e, *Eltanin* 1991, USNM 60010; g, h, E861, NZOI): a, dactylostyle, x 800; b, c, coenosteal papillae, x 88, x 240, respectively; d, gastrostyle and ring palisade, x 122, stereo pair; e, longitudinal section of a gastropore tube illustrating gastrostyle, ring palisade, and commodious upper gastropore chamber, x 53; f, male ampulla, x 58; g, cyclosystem and female ampullae, x 41; h, female ampullae, one with an efferent pore, x 30.5.



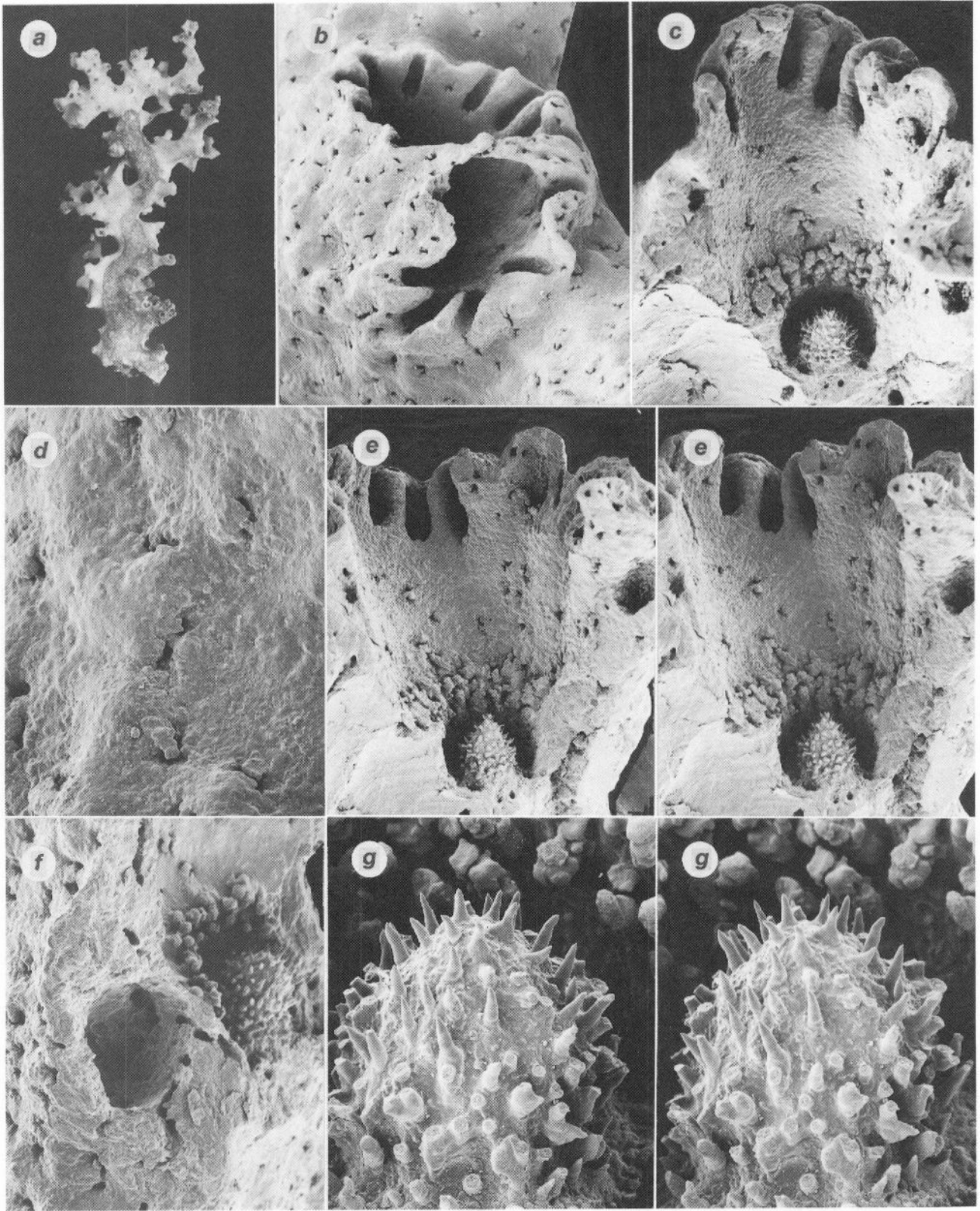


PLATE 55. *Calyptopora sinuosa* (a, f, g, K840, holotype; b-e, P947, USNM 87537): a, holotype colony, x 1.2; b, cyclosystem with fused opposing lids, x 42; c, e, longitudinal section of a gastropore tube illustrating gastrostyle and ring palisade, both x 51 (e is a stereo pair); d, reticulate-granular coenosteal texture, x 145; f, gastrostyle, ring palisade, and cross section of an internal male ampulla, x 78; g, gastrostyle and ring palisade, x 250, stereo pair.

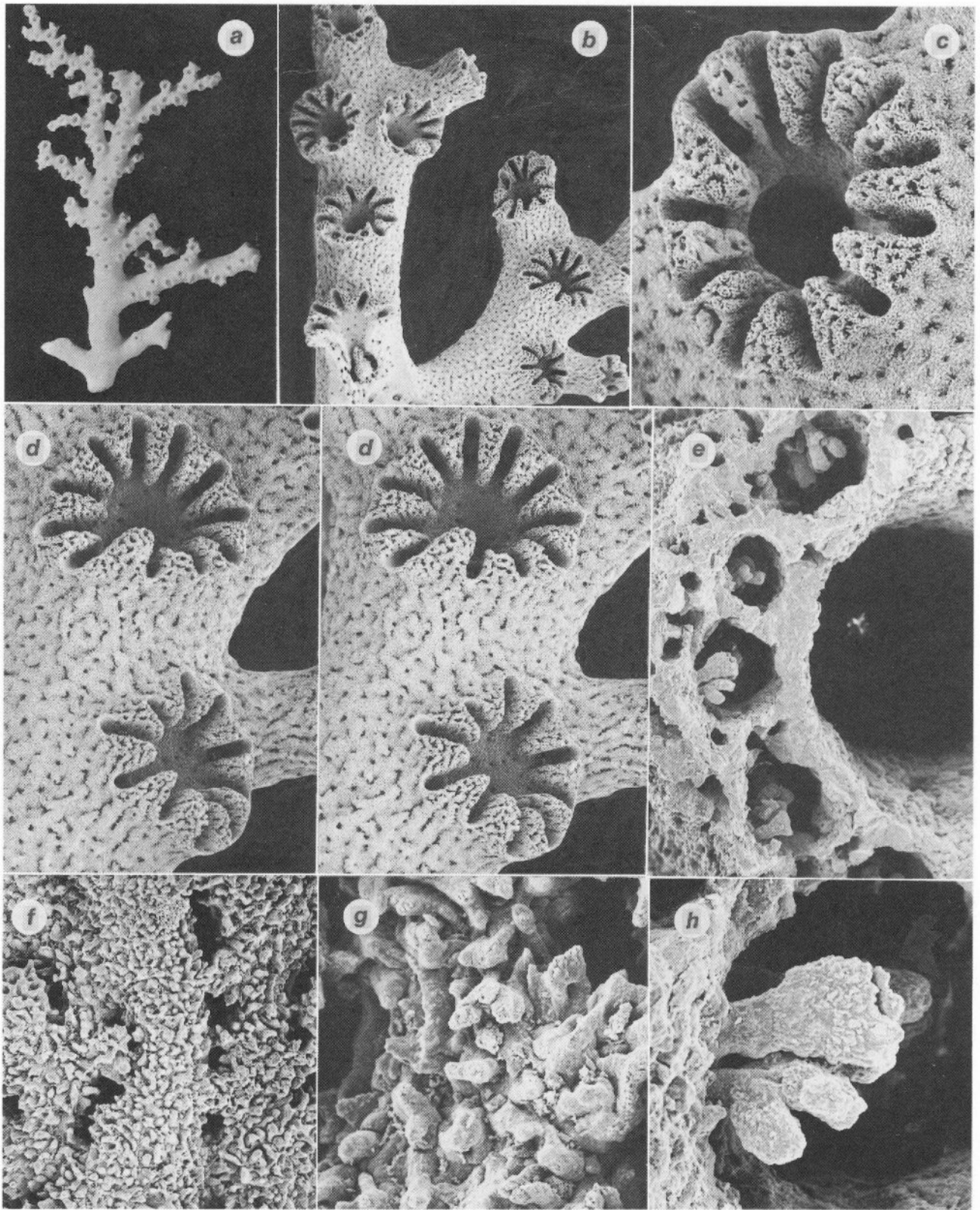


PLATE 56. *Stenohelia conferta* (a, holotype, F132; b-h, paratype, F132): a, holotype colony, x 2.0; b, d, branch segment illustrating unifacial cyclostyles, x 13.8, x 37, respectively; c, cyclostyle, x 67; e, four dactylostyles surrounding a gastropore tube, x 180; f, g, coenosteal texture, x 240, x 810, respectively; h, dactylostyle, x 720.

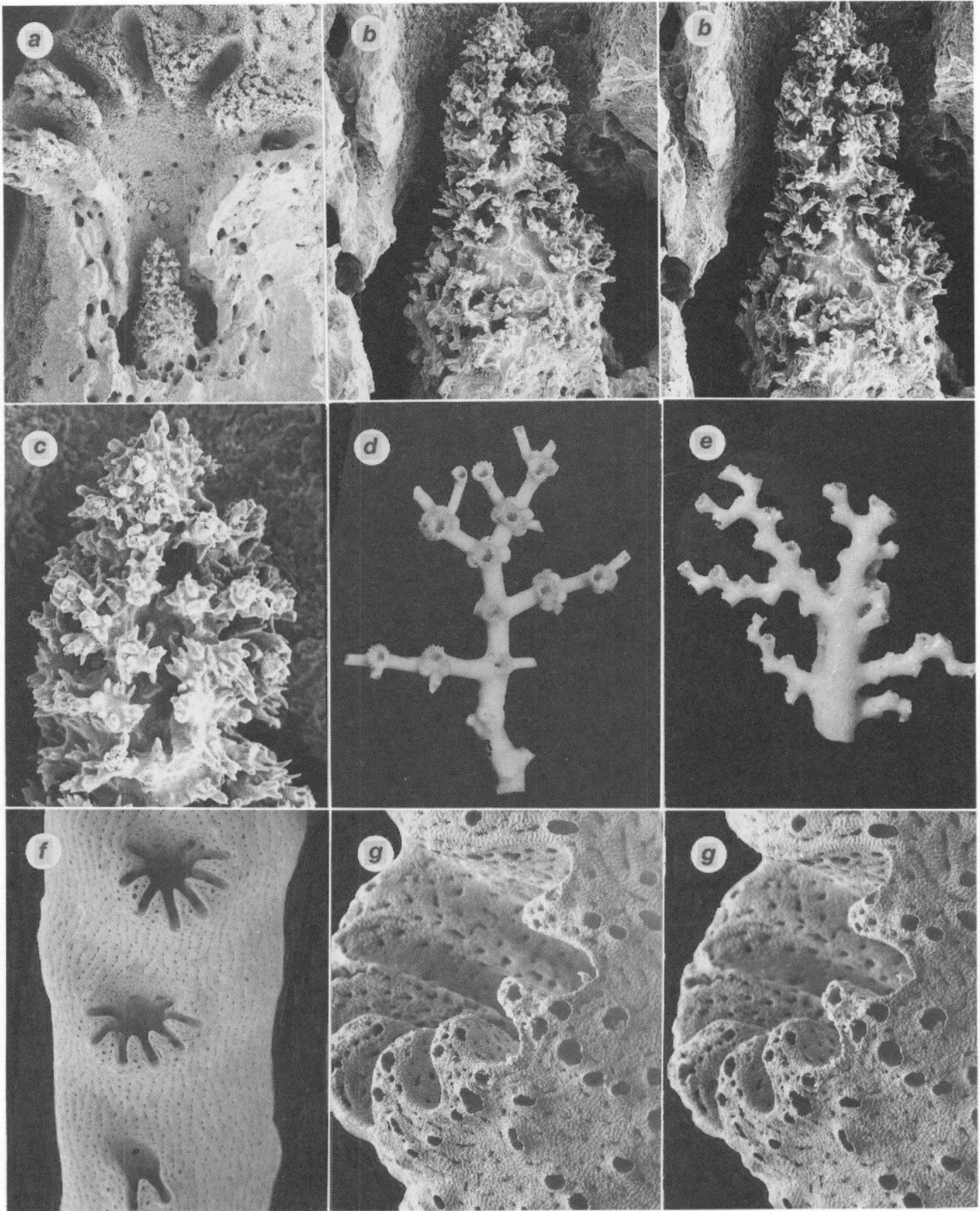


PLATE 57. *Stenohelia conferta* (a-c, F132, paratype): a-c, gastrostyle, x 50, x 163, x 340, respectively (b is a stereo pair). *Stenohelia* sp. cf. *S. profunda* (d, Challenger 170, BM(NH) 1880.11.25.183, paralectotype of *S. profunda*): d, colony, x 2.7. *Conopora verrucosa* (e, holotype of *Stylaster verrucosus*, ZMB 1764; f, Edisto 14-2, USNM 52617; g, D39, USNM 87539): e, holotype colony, x 3.0; f, cyclostomes, x 17; g, cyclostome with numerous nemato-pores, x 64, stereo pair.

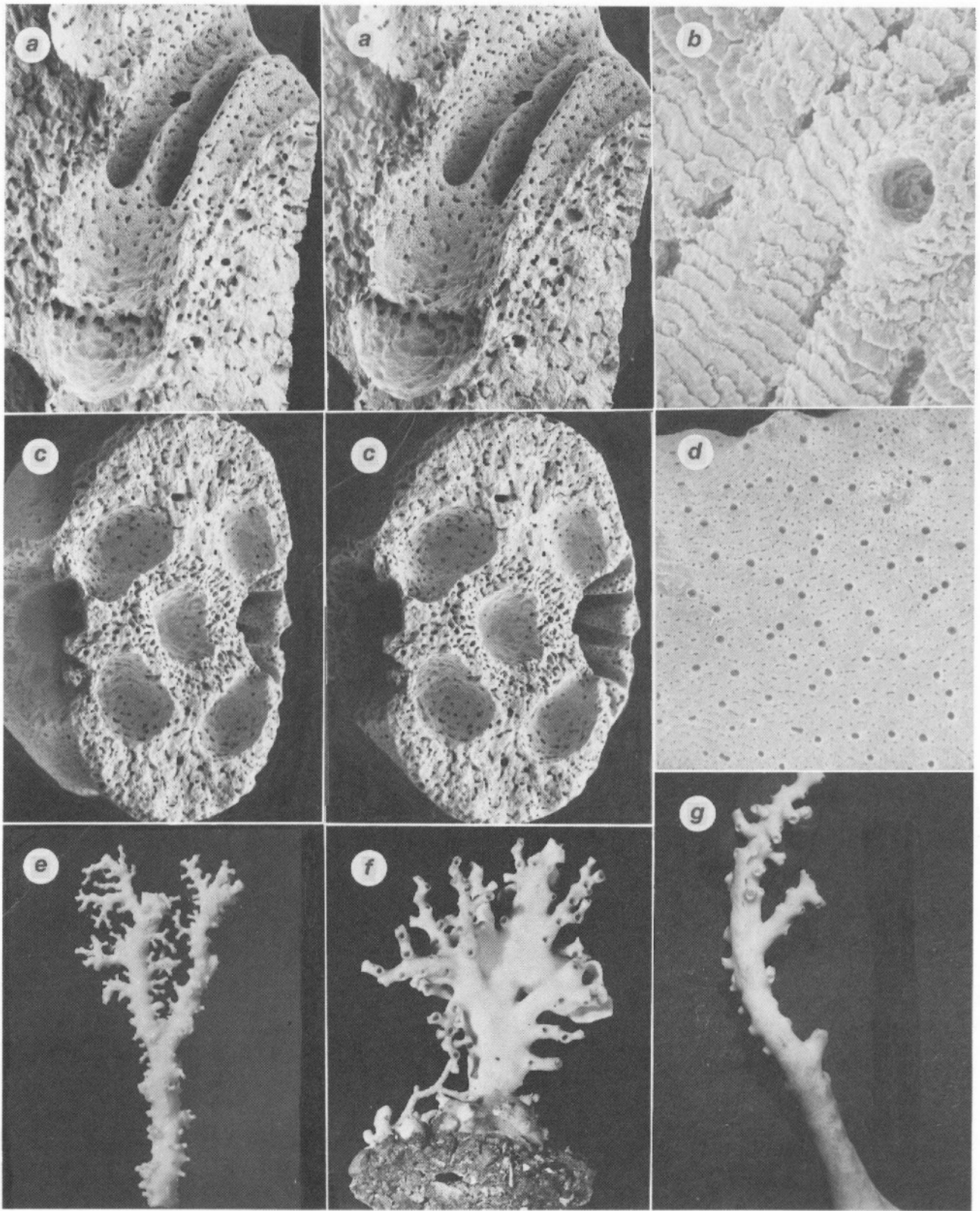


PLATE 58. *Conopora verrucosa* (a, D39, USNM 87539; b, *Vema* 17-61, USNM 60052; c, D150, NZOI; d, *Eltanin* 1089, USNM 52619): a, longitudinal section of a gastropore tube illustrating double chambers and a male efferent pore in upper dactylotome, x 37, stereo pair; b, linear-imbricate coenosteal texture and a nematopore, x 240; c, branch cross section revealing four female ampullae (corners) and base of a gastropore chamber (centre), x 23, stereo pair; d, coenosteum with numerous nematopores, x 19. *Conopora laevis* (e, holotype of *Stylaster obliquus*, ZMB 1778; f, K860, NZOI; g, holotype of *Stylaster laevis* ZMB 1776): e-g, colonies, x 1.0, x 1.5, x 2.0, respectively.

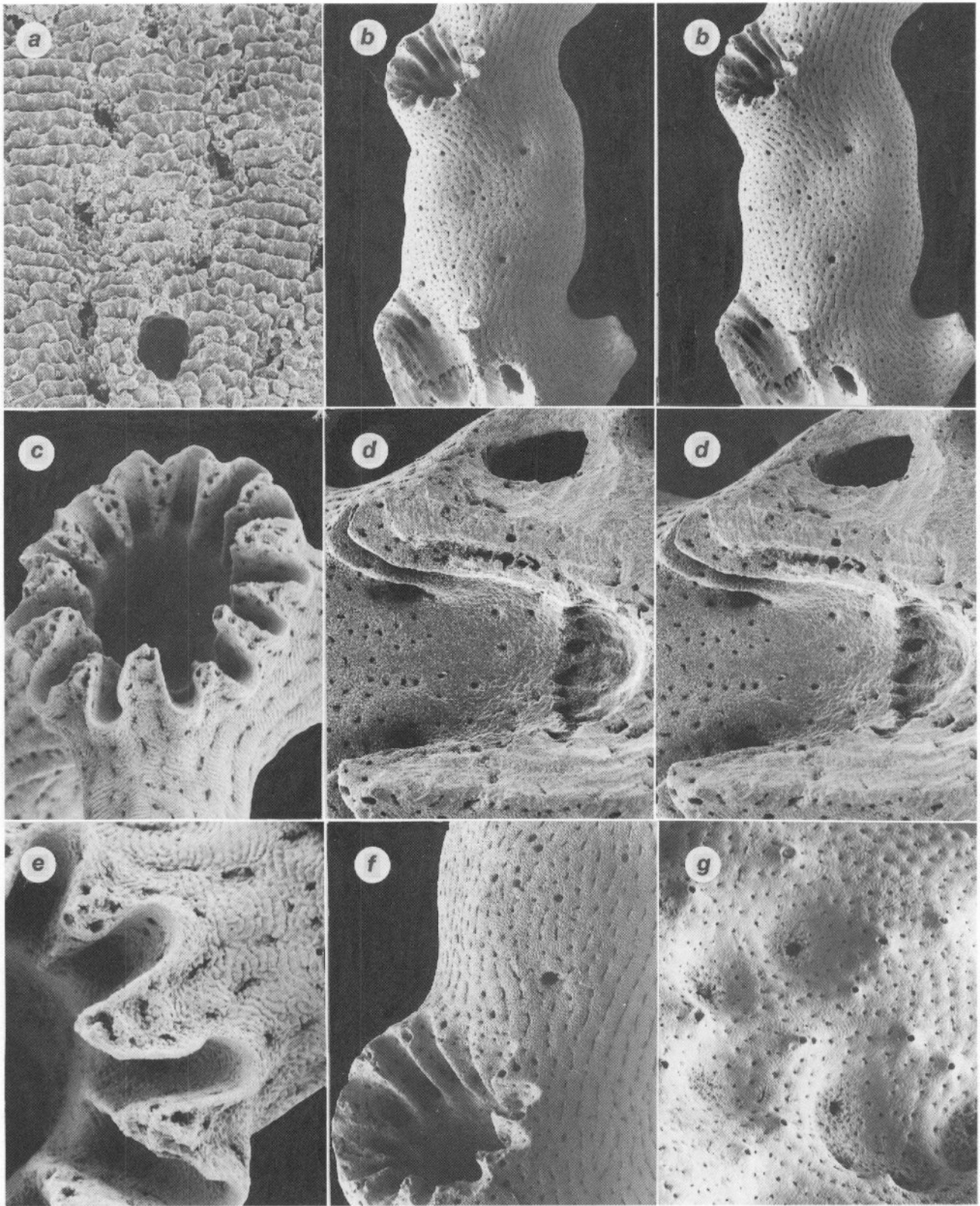


PLATE 59. *Conopora laevis* (a, b, d, f, g, A910, USNM 60254; c, e, holotype of *C. tenuis*, Challenger 170, BM(NH) 1880. 11.25.184): a, linear-imbricate coenosteal texture, x 250; b, branch segment having two cyclosystems and several male ampullae with efferent pores, x 17.5, stereo pair; c, e, cyclosystem with concave pseudosepta, x 50, x 96, respectively; d, rotated longitudinal section of a gastropore tube illustrating double chambers and fractured male ampulla, x 48, stereo pair; f, cyclosystem and male ampulla with efferent pore, x 37; g, female ampullae (broad concavities) within worm tube coenosteum, nematopores interspaced, x 53.

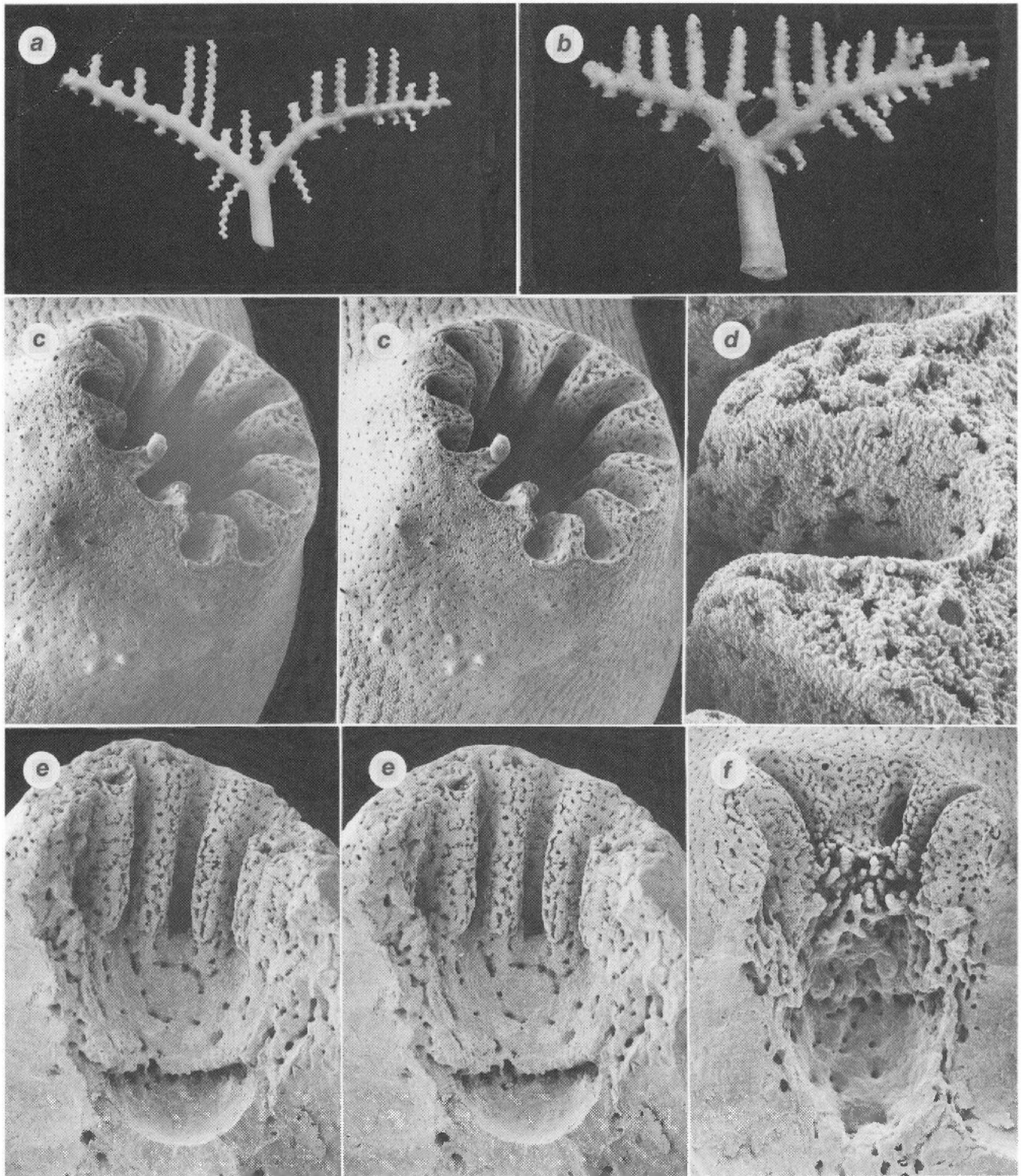


PLATE 60. *Conopora candelabrum* (a, c, d, holotype, E859; b, e, S572, NZOI; f, E859, paratype, NZOI): a, holotype colony, x 0.85; b, colony of variety, x 1.7; c, cyclo system with bulging female ampulla, x 60, stereo pair; d, pseudosepta, x 225; e, longitudinal section of a gastropore tube illustrating double chambers, x 65, stereo pair; f, longitudinal section of a gastropore tube illustrating female efferent pore in upper chamber, x 53.

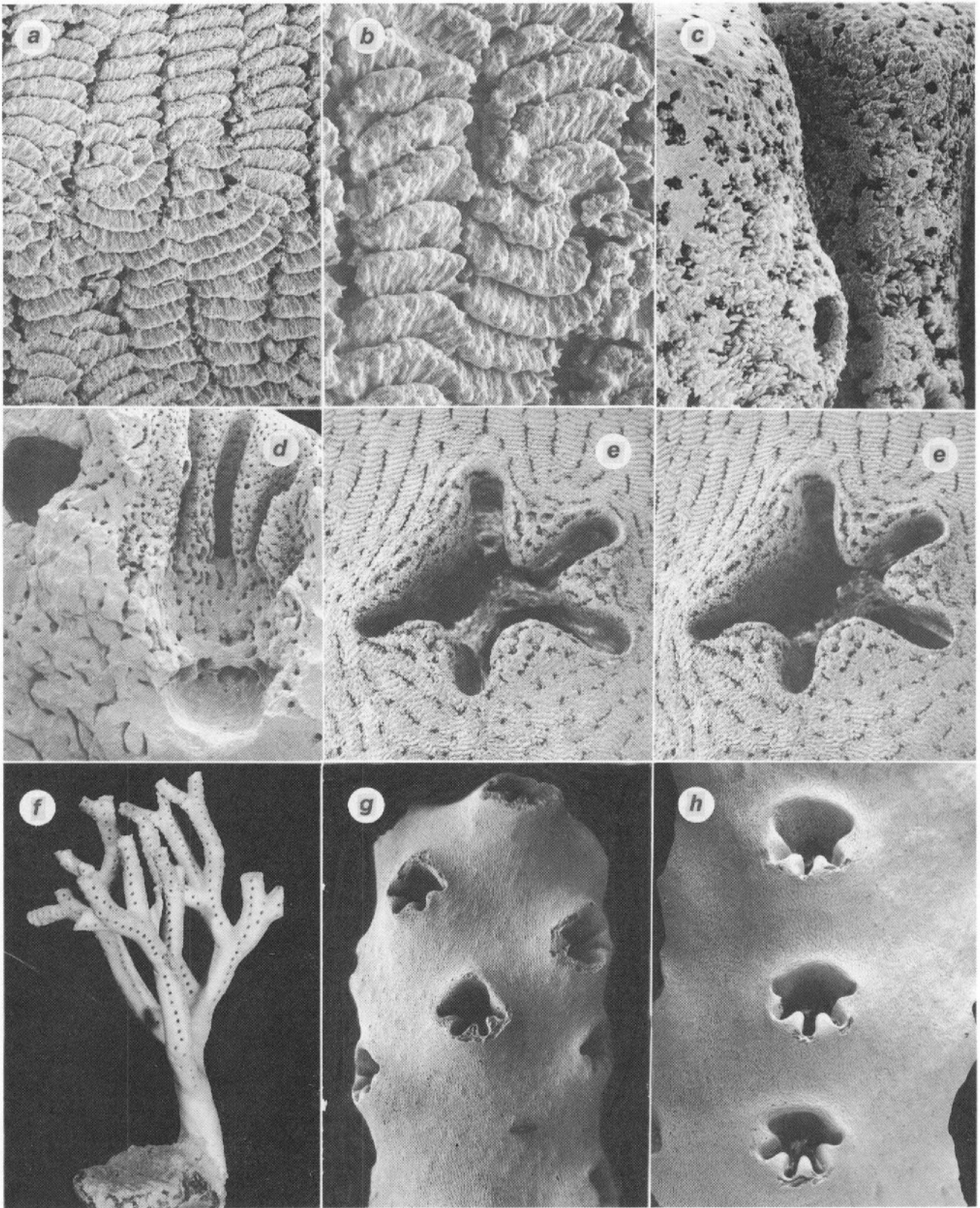


PLATE 61. *Conopora candelabrum* (a, e, S572, USNM 87553, variety; b, E859, holotype, NZOI; c, d, S572, USNM 87552, typical): a, b, linear-imbricate coenosteal texture, x 305, x 690, respectively; c, male efferent pore on a pseudoseptum, x 215; d, longitudinal section of a gastropore tube and male ampulla illustrating an efferent pore on pseudoseptum (see preceding figure), x 53; e, cyclosystem of variety, x 110, stereo pair. *Conopora tetrastichopora* (f, holotype, E846, NZOI; g, h, paratypes, E846, USNM 87556): f, holotype colony, x 0.92; g, h, branch segment illustrating linearly arranged cyclosystems, x 13.1, x 17, respectively.

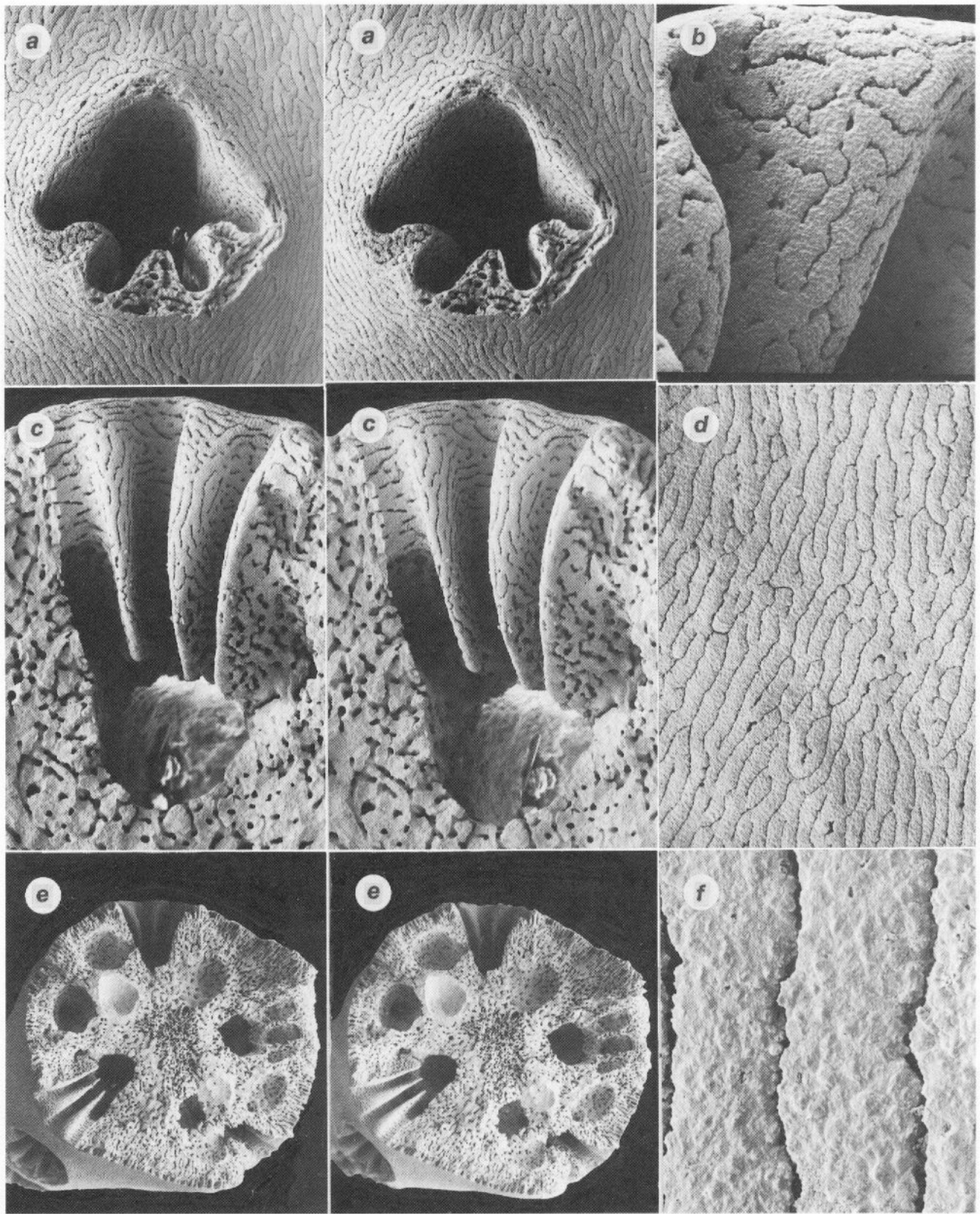


PLATE 62. *Conopora tetrastichopora* (a-f, E846, USNM 87556): a, cyclosteam and coenosteal texture, x 46, stereo pair; b, thick pseudoseptum, x 150; c, fractured cyclosteam revealing several pseudosepta and gastropore ring constriction, x 55, stereo pair; d, f, linear-granular coenosteal texture, x 81, x 580, respectively; e, branch cross section revealing spongy core, three gastropore tubes, and adjacent internal male ampullae, some of the latter revealing efferent pores to gastropore chamber (upper left), x 13.8, stereo pair.



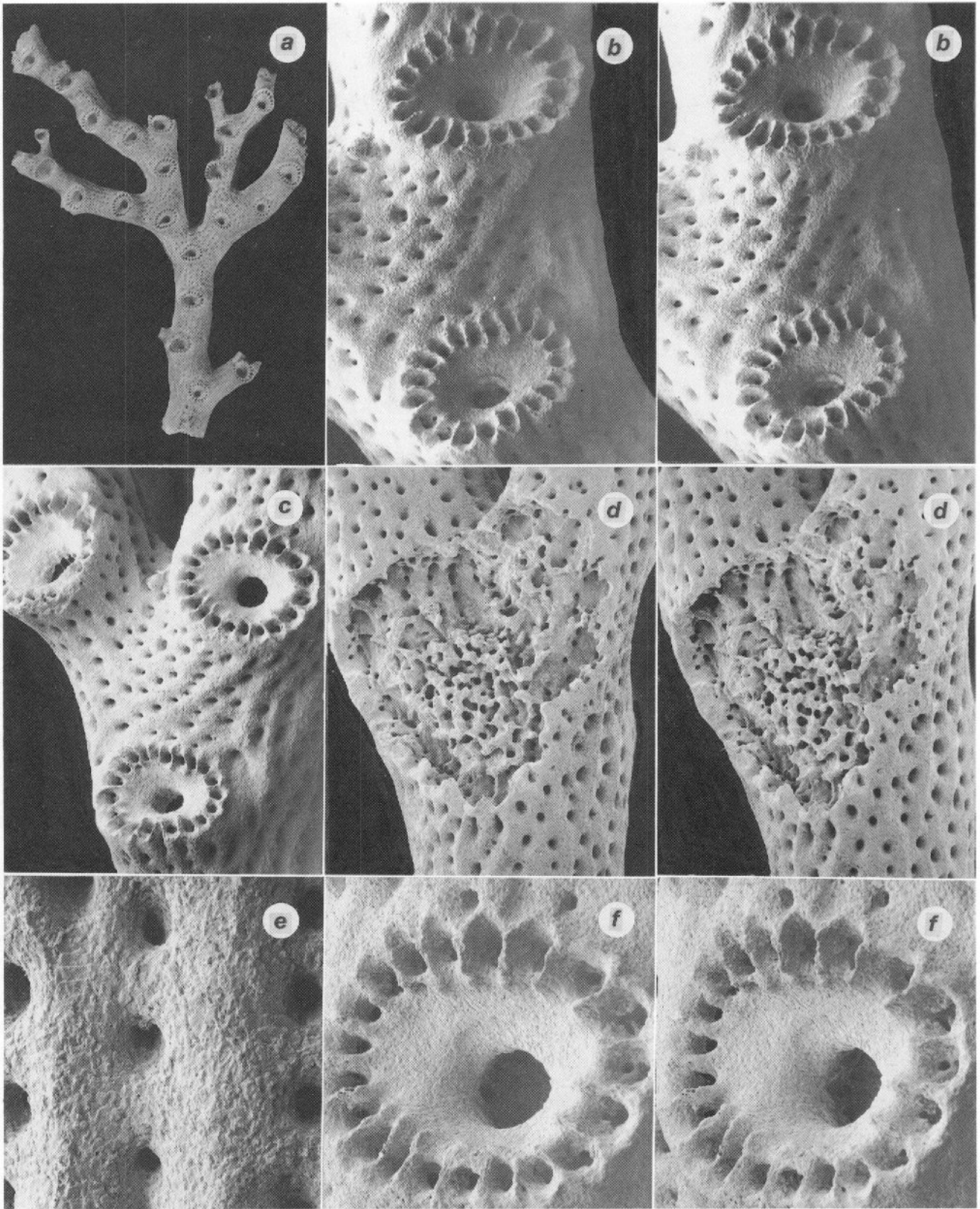


PLATE 63. *Conopora unifacialis* (a, P947; b-f, paratype, P947, USNM 87558): a, holotype colony, x 2.9; b, c, branch segments bearing unifacial cyclo systems, x 20, x 15.5, respectively (b is a stereo pair); d, fractured coenosteum covering massed male ampullae on posterior branch face, x 16.2, stereo pair; e, coenosteal texture, x 82; f, cyclo system, x 41, stereo pair.

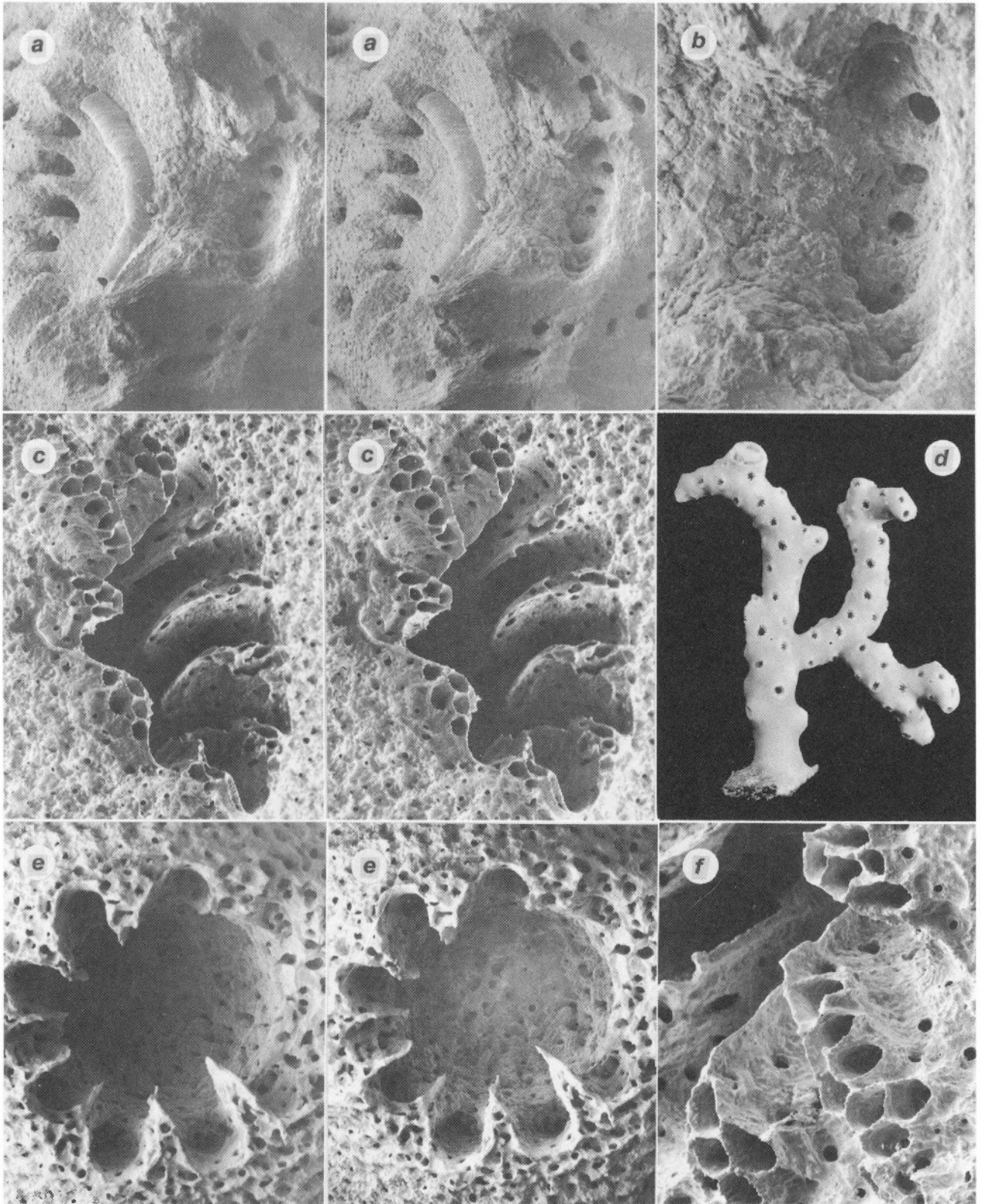


PLATE 64. *Conopora unifacialis* (a, b, P947, USNM 87558): a, b, rotated view of longitudinal section of a gastropore tube illustrating gastropore ring constriction and flattened lower chamber, x 49, x 120, respectively (b is a stereo pair). *Conopora gigantea* (c-f, holotype, 196, NZOI): c, oblique view of a cyclo system, x 26, stereo pair; d, holotype colony, x 0.9; e, oral view of a cyclo system, x 26, stereo pair; f, loculated pseudosepta, x 54.

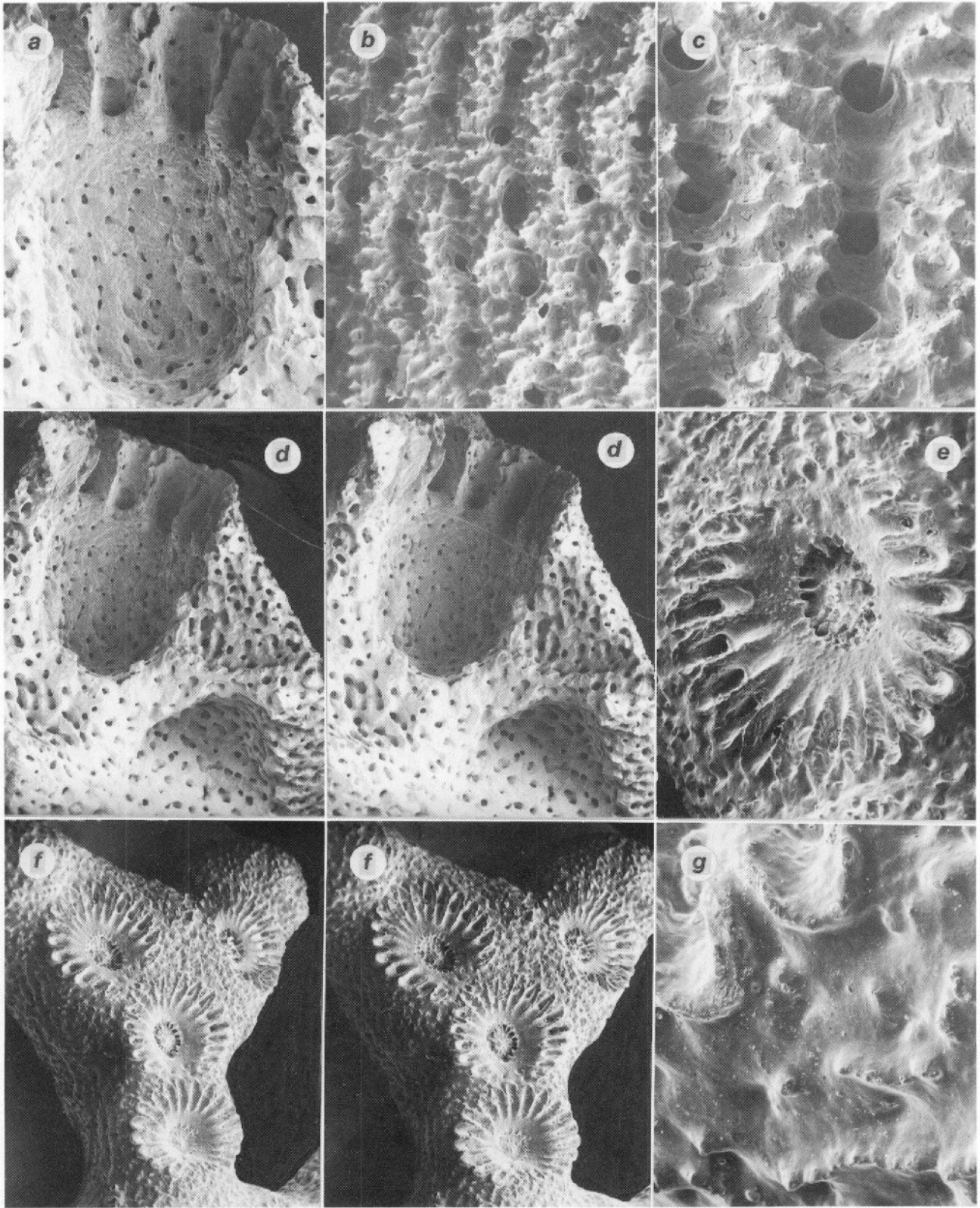


PLATE 65. *Conopora gigantea* (a–d, holotype, I96, NZOI): a, longitudinal section of a gastropore tube illustrating the lack of a gastropore ring constriction, x 28; b, c, coenosteal texture, x 72, x 195, respectively; d, longitudinal section of a gastropore tube and part of a female (?) ampulla (lower right), x 17.3, stereo pair. "*Conopora*" *anthohelia* (e–g, holotype, P947, NZOI): e, cyclosystem with a "gastrostyle" mound, x 21.5; f, branch tip illustrating closely adjacent, unilinear cyclosystems, x 8.0, stereo pair; g, edges of pseudosepta (upper left) and coenosteal texture, x 82.

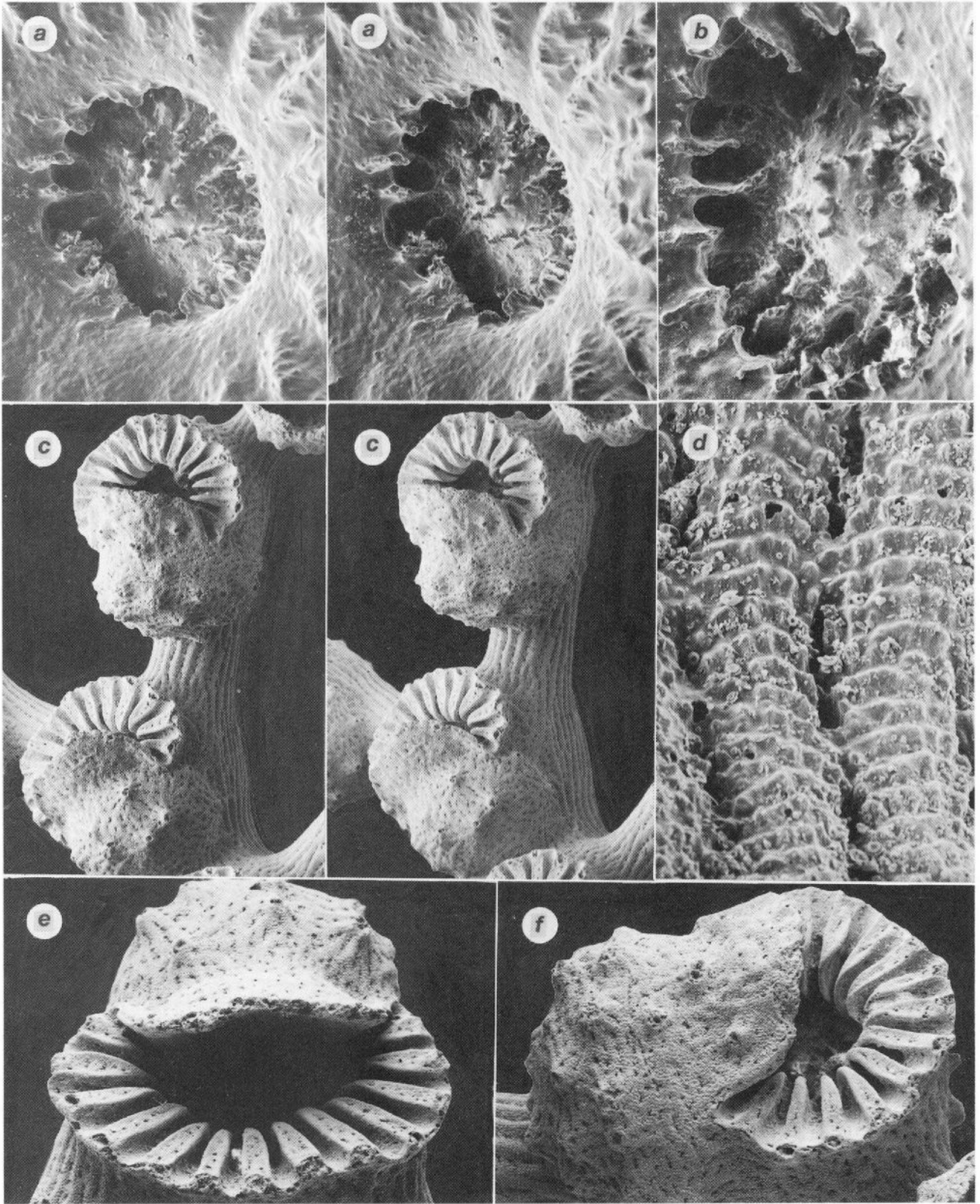


PLATE 66. "*Conopora*" *anthohelia* (a, b, holotype, P947, NZOI): a, b, view of gastropore ring constriction and central "gastrostyle" mound, x 52.5, x 78, respectively (a is a stereo pair). *Astya aspidopora* (c-f, U599, USNM 87559, female): c, e, f, cyclostomes, each with a prominent female ampulla, x 27, x 53, x 52, respectively; d, worn linear-imbricate coenosteal texture, x 460.

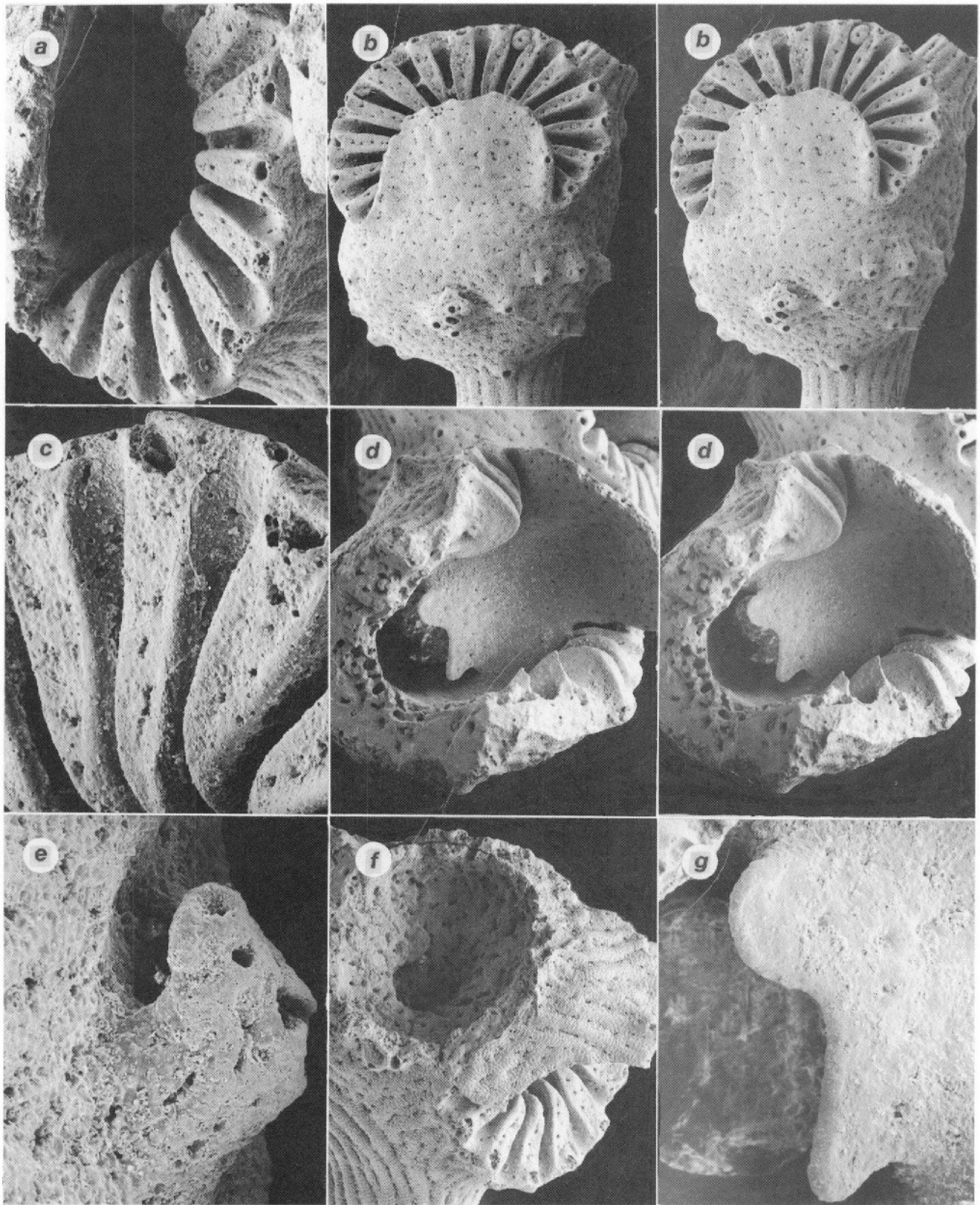


PLATE 67. *Astya aspidopora* (a–g, U599, USNM 87559): a, pseudosepta, each having one nematopore on its upper outer edge, x 80; b, intact cyclosystem illustrating pseudosepta, lid, and a male ampulla with ten conical nematopore mounds and one efferent pore (see also fig. e), x 43.5, stereo pair; c, pseudosepta, x 19; d, longitudinal section of a gastropore tube illustrating its notched inner shelf, x 45, stereo pair; e, enlargement of spur covering male efferent pore, x 275; f, fractured female ampulla revealing efferent pore that leads into lower gastropore chamber, x 53; g, upper gastropore chamber notched shelf, x 162.

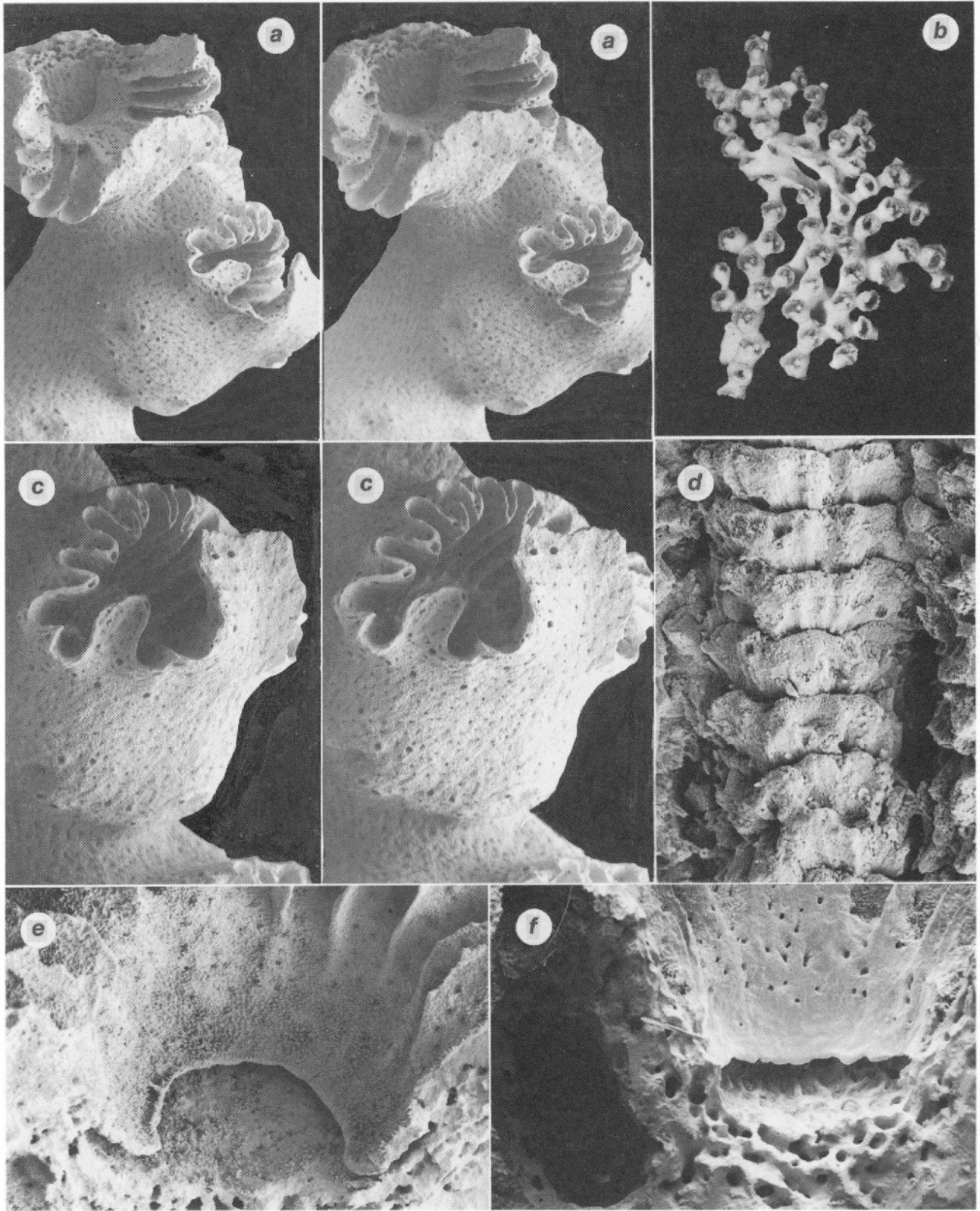


PLATE 68. *Crypthelia studeri* (a–c, f, holotype, D39, NZOI; d, e, *Eltanin* 1851, USNM 60094): a, c, cyclo systems having circumferential male ampullae, apical efferent pore also visible, x 20, x 31, respectively (both stereo pairs); b, holotype colony, x 2.05; d, linear-imbricate coenosteal texture, x 575; e, f, longitudinal section of gastropores illustrating gastropore ring constriction and flattened lower chamber, x 66, x 58, respectively.

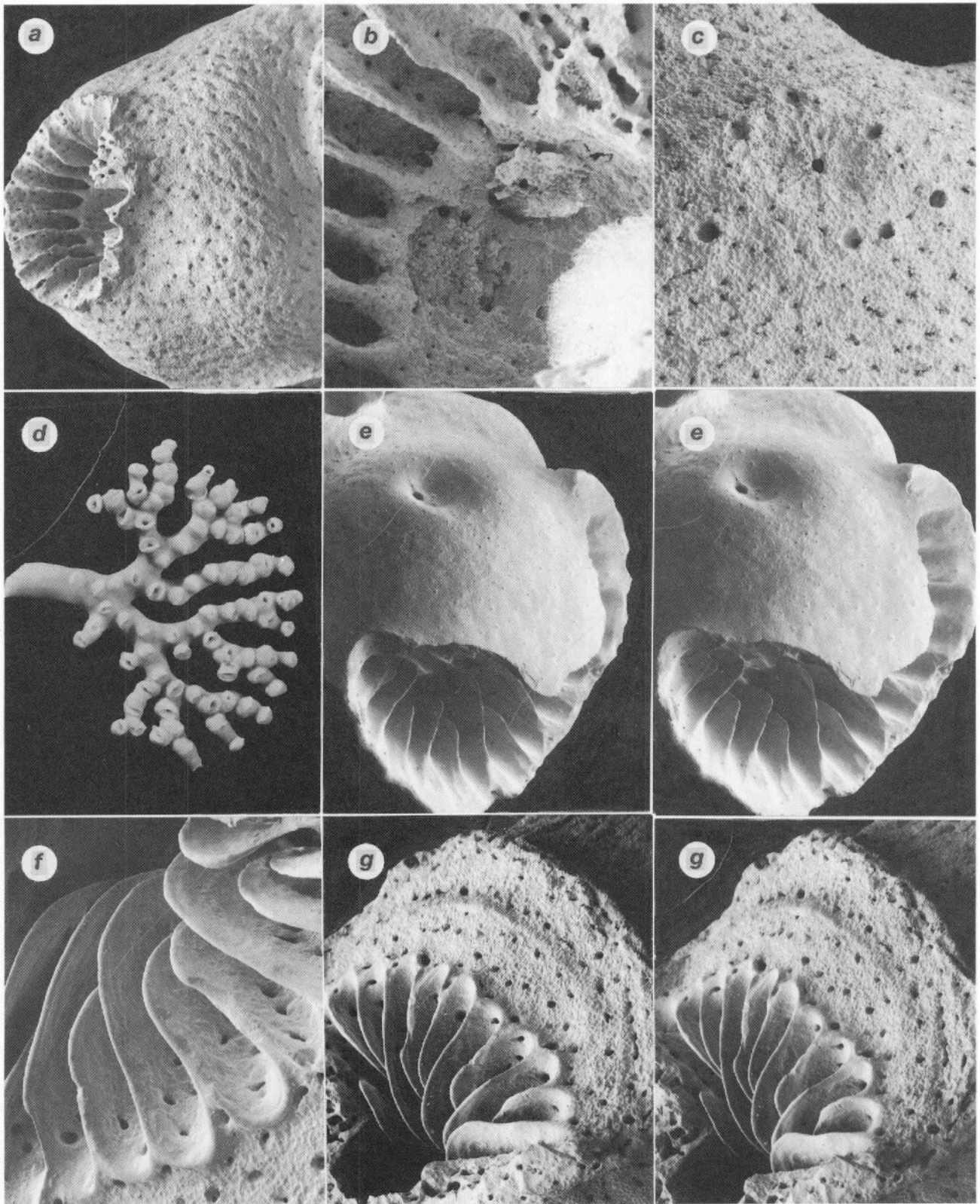


PLATE 69. *Cryptothelia studeri* (a, b, *Eltanin* 1991, USNM 60265; c, holotype, D39, NZOI): a, cyclo-system (with lid removed) with large female ampulla, x 21; b, two large female efferent pores in upper gastropore chamber, x 60; c, convex, centrally perforate male efferent pore surrounded by seven nematopores, x 66. *Cryptothelia robusta* (d, holotype, I97, NZOI; e-g, I97, USNM 87562): d, holotype colony, x 1.25; e, cyclo-system with male ampulla having an efferent pore in lower lid, x 25, stereo pair; f, thin, unequal pseudosepta, x 78; g, cyclo-system illustrating unequal pseudosepta and a broad lip, x 47.5, stereo pair.

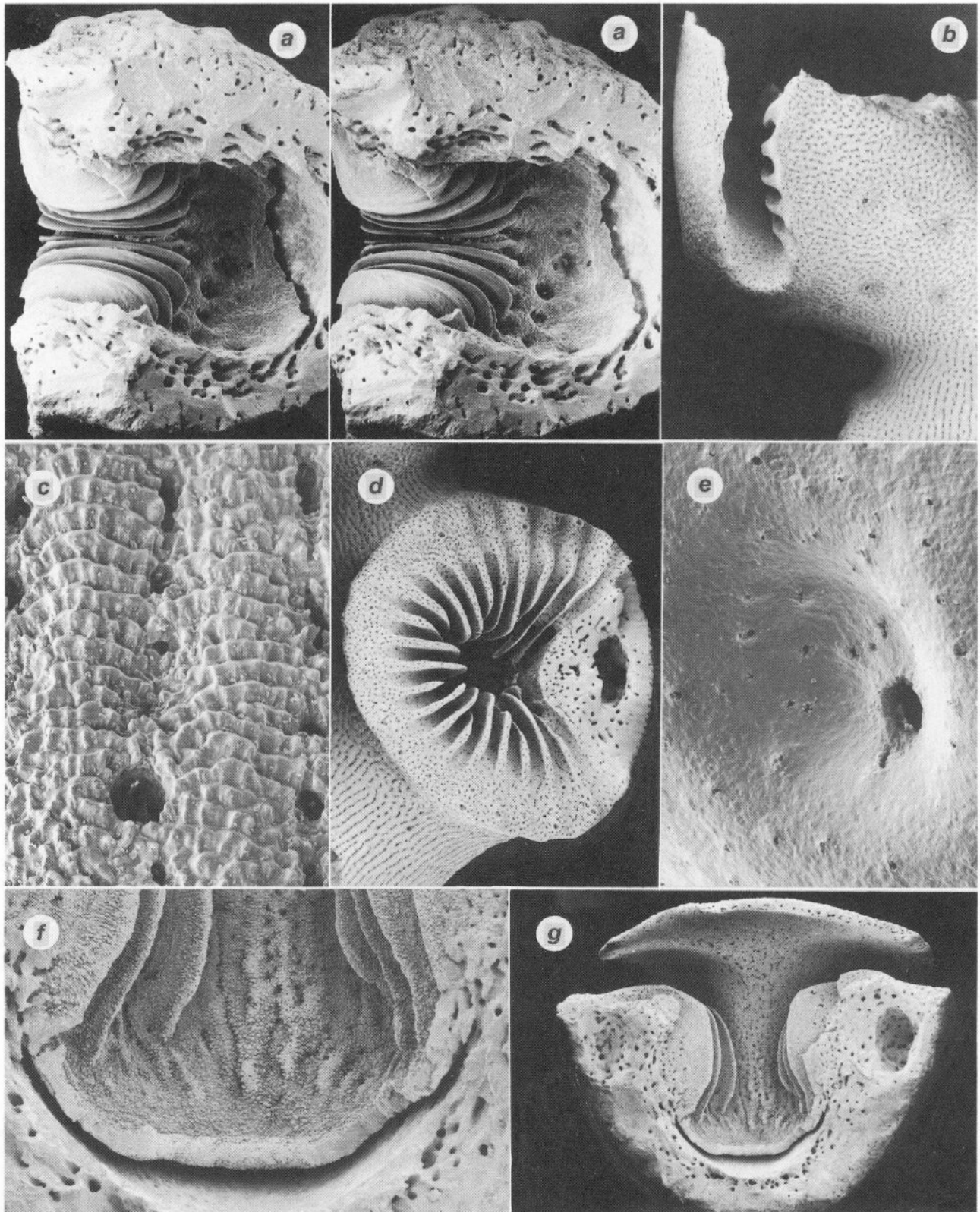


PLATE 70. *Cryptothelia robusta* (a, c, e, I97, USNM 87562; b, d, f, g, P9, NZOI): a, rotated longitudinal section of a gastropore tube illustrating thin-edged, recurved pseudosepta, x 30.5, stereo pair; b, lateral view of a male cyclosystem illustrating four efferent pores, x 20; c, linear-imbricate coenosteal texture, x 240; d, oral view of a cyclosystem with lid removed to reveal pseudosepta of unequal lengths, x 17; e, male efferent pore, x 120; f, g, longitudinal section of gastropore tube illustrating very thin lower chamber and circumferential male ampullae, x 48, x 16, respectively.



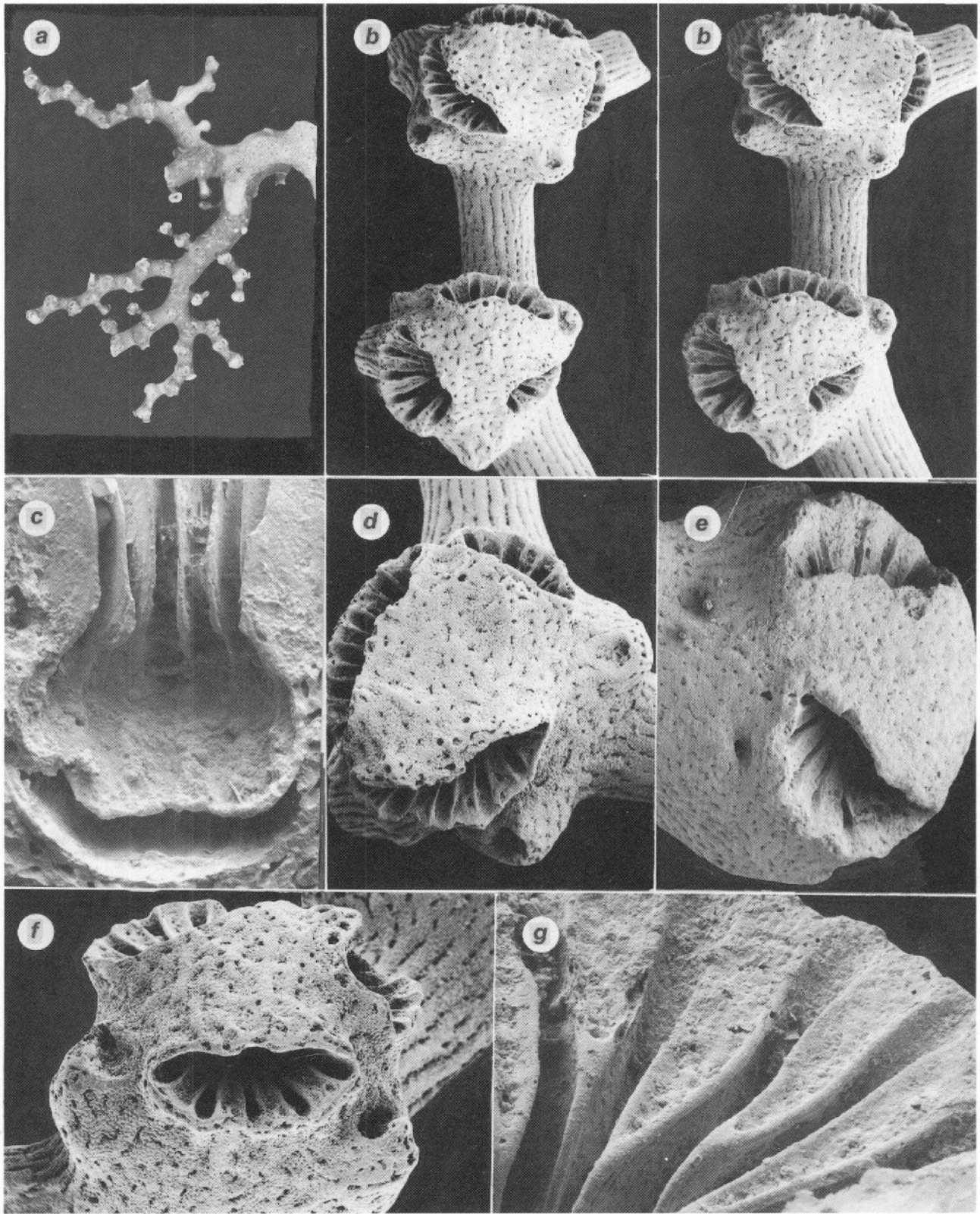


PLATE 71. *Crypthelium polypoma* (a, c, e, g, holotype, T256; b, d, f, G3, USNM 87563): a, holotype colony, x 1.15; b, d, f, cyclosystems with multiple fused lids, each cyclosystem surrounded by male ampullae with spurs overhanging their efferent pores, x 24, x 40, x 46, respectively (b is a stereo pair); c, longitudinal section of a gastropore tube illustrating the spherical upper chamber and flat lower chamber, x 58.5; e, cyclosystem with fused lids, x 30; g, broad, concave pseudosepta, x 115.

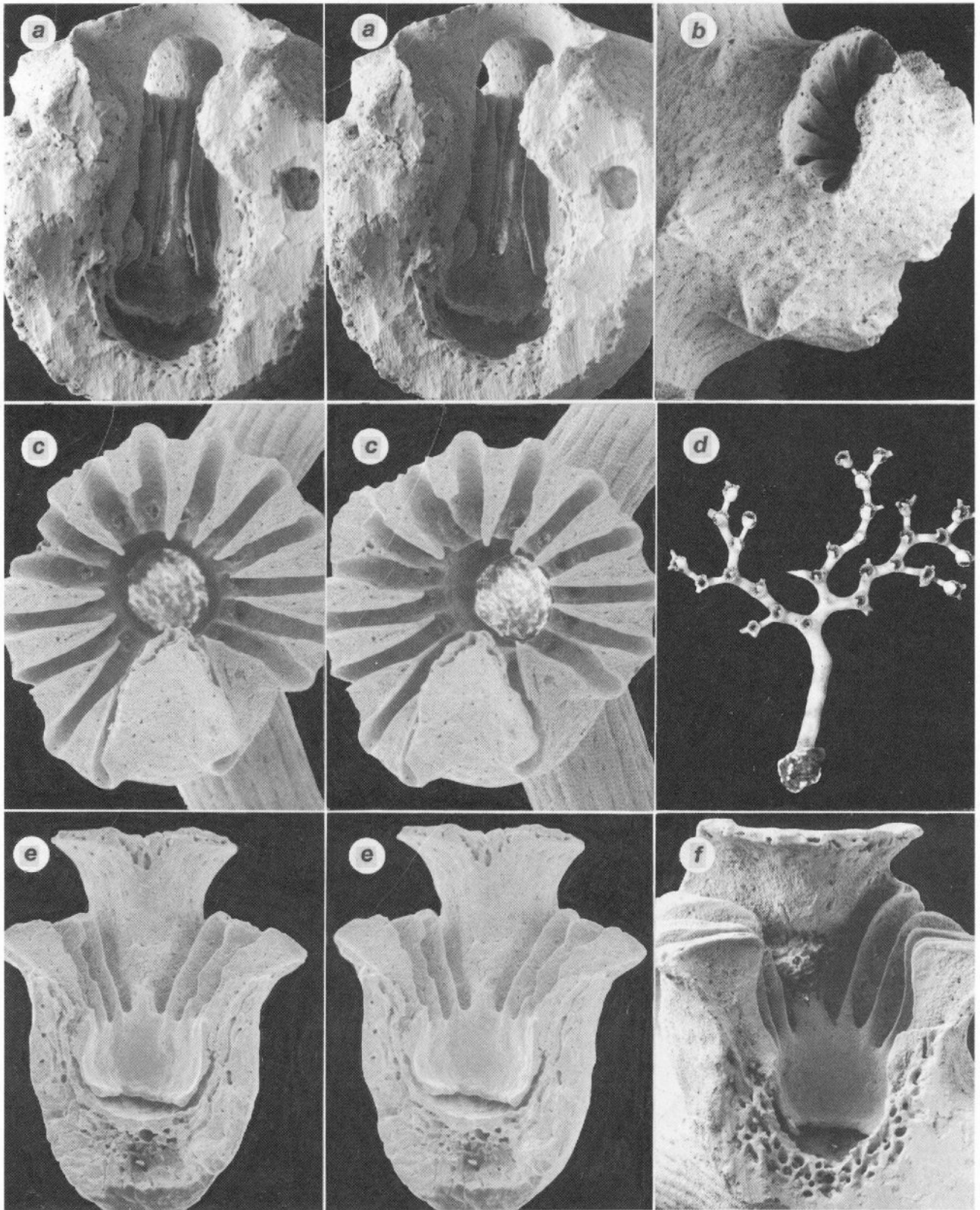


PLATE 72. *Crypthelia polypoma* (a, b, U599, USNM 87564): a, longitudinal section of a gastropore tube illustrating male ampullae and fused lids, x 30, stereo pair; b, cyclosystem surrounded by male ampullae, x 30. *Crypthelia fragilis* (c, e, f, *Eltanin* 17-5, USNM 60089, paratypes; d, *Eltanin* 1852, USNM 60091): c, oral view of a cyclosystem, x 41, stereo pair; d, paratype colony, x 2.2; e, longitudinal section of gastropore tube illustrating chambers, stereo pair; f, longitudinal section of a gastropore tube illustrating female efferent pore beneath lid, x 380.

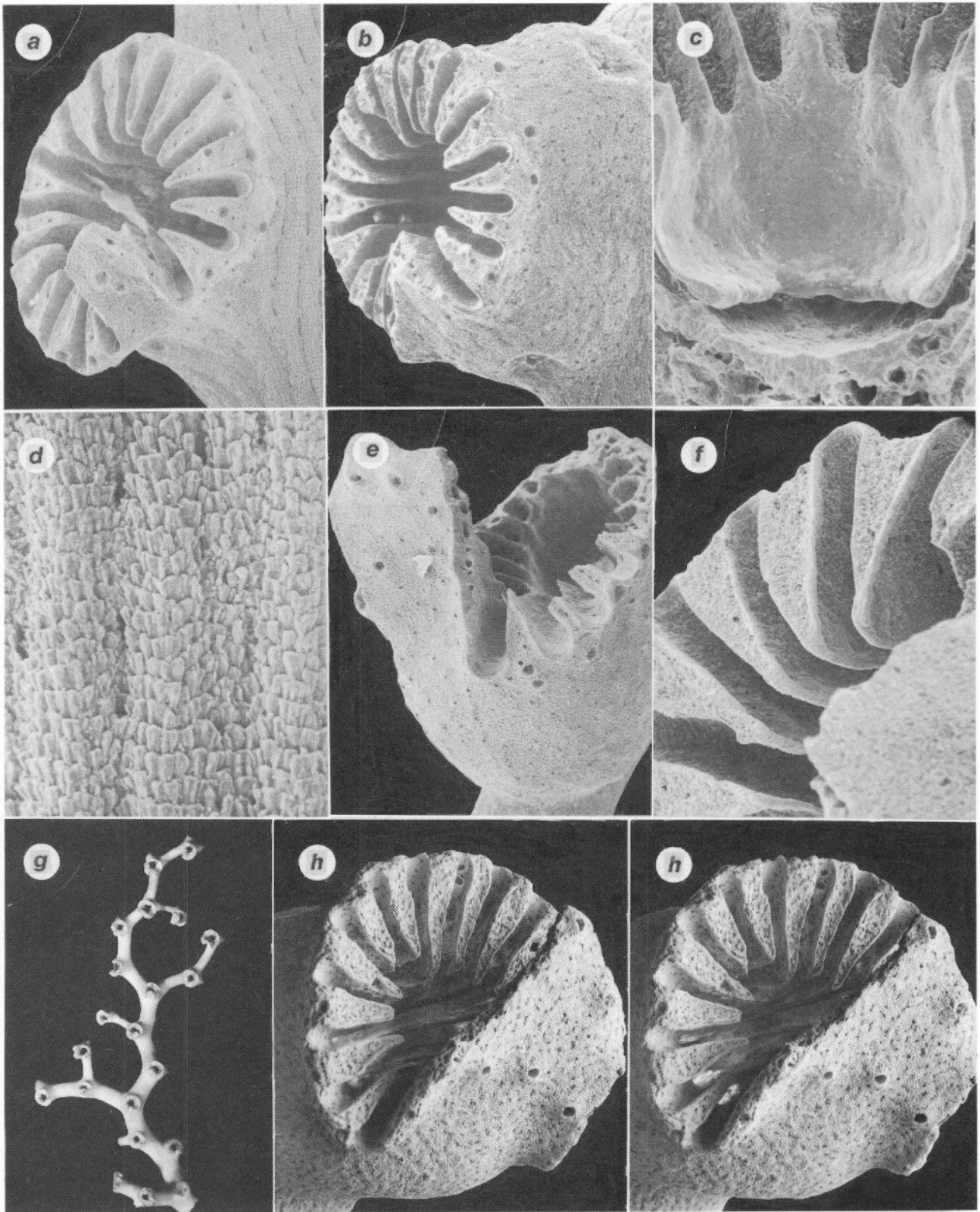


PLATE 73. *Cryptothelia fragilis* (a–f, *Eltanin* 17–5, paratypes, USNM 60089): a, cyclosystem, x 44; b, cyclosystem with two male ampullae and corresponding efferent pores (nematopores common on pseudosepta), x 36; c, longitudinal section of cyclosystem illustrating spherical upper chamber, gastropore ring constriction, and flat lower chamber, x 92; d, linear-imbricate coenosteal texture, x 240; e, cyclosystem with female ampulla in lid base, x 40; f, concave pseudosepta, x 88. *Cryptothelia curvata* (g, holotype, E860, NZOI; h, U599, USNM 87566): g, holotype colony, x 1.8; h, cyclosystem with partially broken lid revealing concave pseudosepta, x 33, stereo pair.

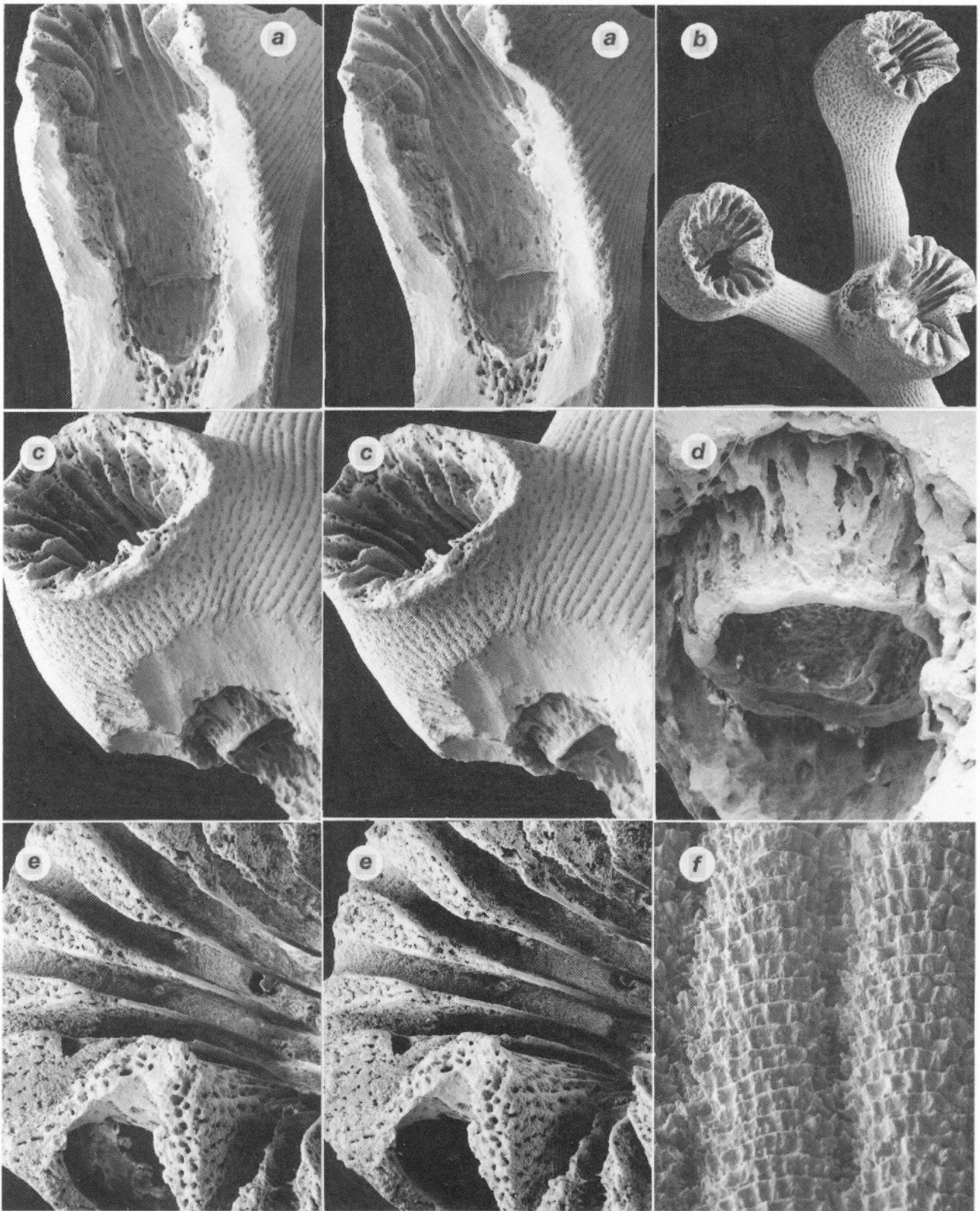


PLATE 74. *Crypthelia curvata* (a, c, d, f, S568, NZOI; b, e, E305, USNM 87565): a, longitudinal section of a curved gastropore tube, x 23.5, stereo pair; b, three cyclosystems lids broken away), x 13.5; c, excavation of lower gastropore tube revealing gastropore ring constriction of figured cyclosystem, x 28, stereo pair; d, enlargement of gastropore ring constriction, x 78.5; e, cyclosystem with lid removed to show male efferent pore on pseudoseptum adjacent to lid, x 61, stereo pair; f, linear-imbricate coenosteal texture, 32.5.

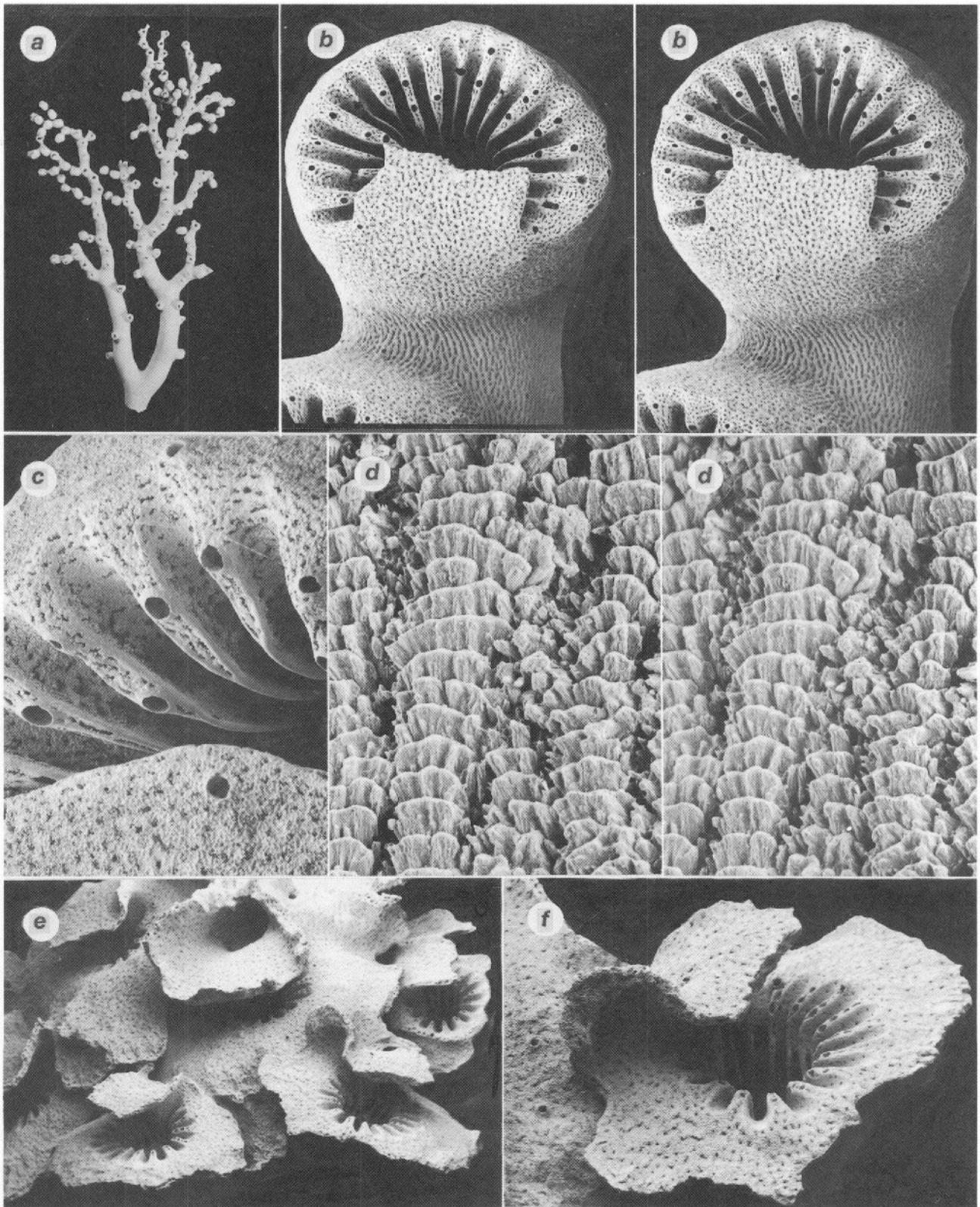


PLATE 75. *Cryptothelia cymas* (a-f, E861, USNM 87569, male): a, colony, x 0.72; b, oral view of a typical cyclo-system (with broken lid) having 2-3 nematopores per pseudoseptum and two efferent pores on upper right pseudosepta (see also Plate 76, c), x 21, stereo pair; c, pseudosepta bearing large nematopores, x 68; d, linear-imbriate coenosteal texture, x 335; e, f, anomalous cyclo-systems with broad lips, x 16.5, x 36, respectively.

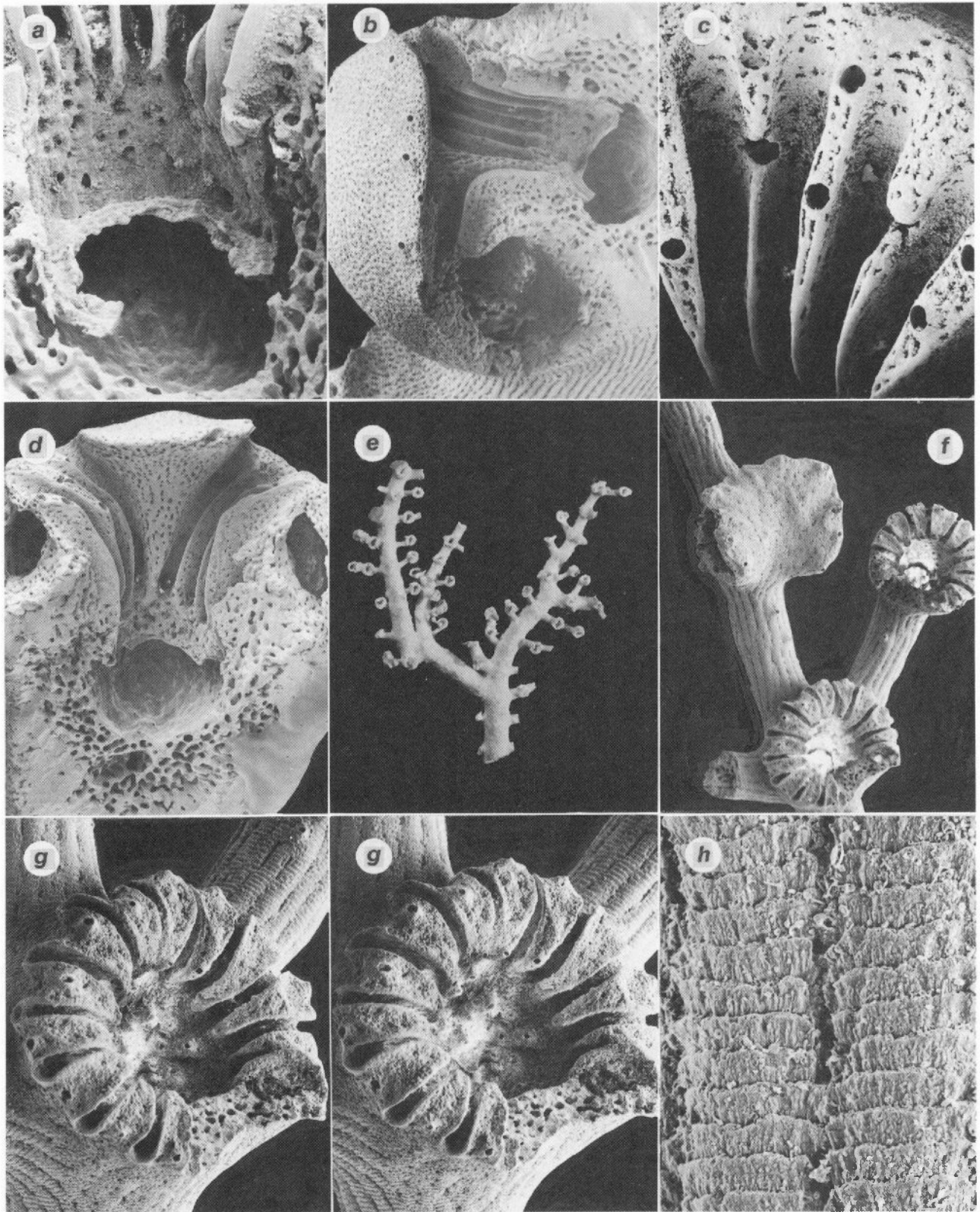


PLATE 76. *Cryptothelia cymas* (a-d, E861, USNM 87569): a, gastropore ring constriction, x 66; b, rotated view of longitudinal section of a gastropore tube illustrating female ampullae and swollen lid, x 25.5; c, pseudosepta, each bearing 1 or 2 nematopores and two bearing larger male efferent pores (see also Plate 75, b), x 76; d, longitudinal section of a cyclosystem illustrating circumferential male ampullae, x 26. *Pseudocryptothelia pachypoma* (e-h, G3, USNM 87567): e, colony, x 3.1; f, three cyclosystems, only one having an intact lid, x 28; g, cyclosystem with lid removed to reveal broad, concave pseudosepta and nematopores in upper chamber, x 73, stereo pair; h, worn linear-imbricate coenosteal texture, x 470.

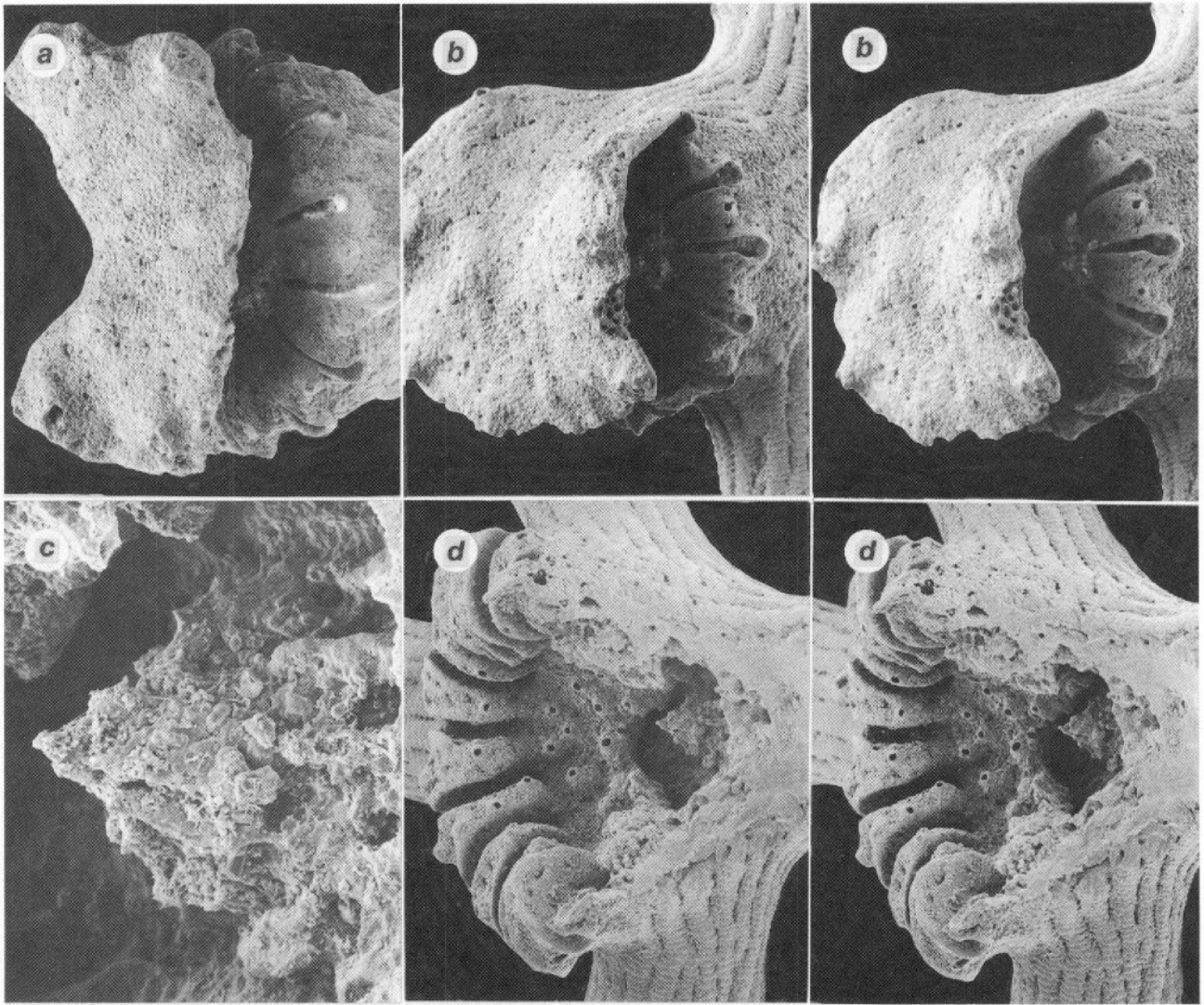


PLATE 77. *Pseudocrypthelix pachypoma* (a-d, G3, USNM 87567): a, b, cyclosystem with a broad lid, x 74, x 66, respectively (b is a stereo pair); c, gastrostyle, x 365; d, longitudinal section of a gastropore tube illustrating a gastrostyle, gastropore ring constriction, and nematopores in upper chamber and on pseudosepta, x 73.

