

different cases of regular disposition were observed:—(A) two opposite beams in one axis; (B) four beams, opposite in pairs in two axes perpendicular one to another; (C) six beams, opposite in pairs in the three dimensive axes; (D) eight beams, opposite in pairs in the four diagonals of the regular cube; (E) twelve beams corresponding to the twelve axes of the regular icosahedron; (F) fourteen beams quite regularly disposed (six corresponding to the three axes of the regular octahedron, eight to the central points of its faces); (G) twenty beams (probably corresponding to the twenty corners of a regular dodecahedron); (H) thirty-two beams, regularly disposed. Rarely the number of the radial beams is intermediate between these eight cases, and rarely it is higher; then commonly the disposition is irregular. The regularity of their disposition in the great majority of cases is very remarkable and evident.

Synopsis of the Genera of Liosphærida.

I. Subfamily Ethmosphærida. (Shell one single latticed sphere.)	Pores of the shell simple, not prolonged into free tubuli.	Shell-cavity simple,	15. <i>Cenosphæra</i> .
		Shell-cavity with radial beams united in the centre,	16. <i>Stigmosphæra</i> .
	Pores prolonged into free conical or cylindrical tubuli.	Tubuli external, centri- fugal,	17. <i>Ethmosphæra</i> .
		Tubuli internal, centri- petal,	18. <i>Sethosphæra</i> .
II. Subfamily Carposphærida. (Two concentric spheres.)		One shell medullary (intracapsular), the other cortical (extracapsular),	19. <i>Carposphæra</i> .
		Both shells cortical (near together),	20. <i>Liosphæra</i> .
III. Subfamily Thecosphærida. (Three concentric spheres.)		Two shells medullary (intracapsular), one shell cortical (extracapsular),	21. <i>Thecosphæra</i> .
		One shell medullary (intracapsular), two shells cortical (extracapsular),	22. <i>Rhodosphæra</i> .
IV. Subfamily Cromyosphærida. (Four concentric spheres.)		Two inner medullary shells (intracapsular), and two outer cortical shells (extracapsular),	23. <i>Cromyosphæra</i> .
V. Subfamily Caryosphærida. (Five or more concentric spheres.)		Two inner medullary shells, and three or more outer cortical shells,	24. <i>Caryosphæra</i> .
VI. Subfamily Plegmosphærida. (Spherical shell wholly or partially of spongy structure.)	Spongy sphere without latticed medullary shell in the centre.	Sphere solid,	25. <i>Styptosphæra</i> .
		Sphere with a central cavity,	26. <i>Plegmosphæra</i> .
	Spongy sphere with one or two latticed medul- lary shells in the centre.	One single medullary shell,	27. <i>Spongoplegma</i> .
Two concentric medul- lary shells,		28. <i>Spongodictyon</i> .	