FIG. 130. TYPES OF OCTAHEDRONS

CHAPTER X

THE OCTAHEDRON GROUP B

THESE elements occur at the extreme left-hand swing of the pendulum. Their characteristic valence is four. They all have eight funnels opening on the faces of an octahedron and two of them add spikes pointing to the six corners.

ATOMIC NO.	ANU	ELEMENT	CENTRE	FUNNELS	SPIKES
14	520	Silicon	—	8 (B5+4Si15)	
32	1,300	Germanium	Be4+2Ad24	8 (4Ge39)	
50	2,124	Tin	Ne120	8 (4Ge39)	6Sn126
65	2,916	Terbium	Ne120	8 (4Ge39+2Mo46+L7)	6Sn126
82	3,727	Lead	Tl.687	4 (Ca160+Mo46+4Sn35 +Pb31) 4 (Ca160+4Ge39+Mo46 +Pb21)	

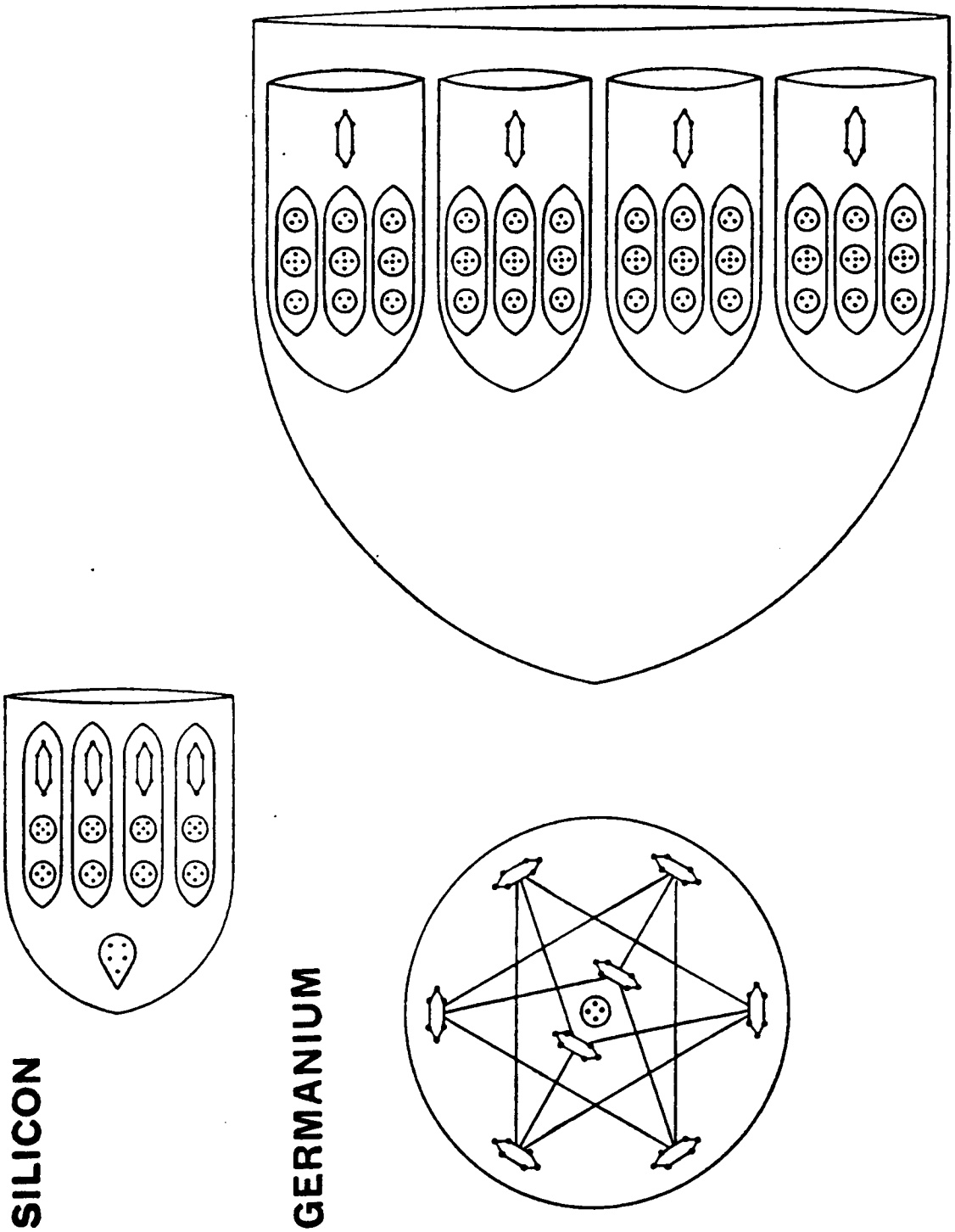


FIG. 131. SILICON AND GERMANIUM

ATOMIC NO. 14.

SILICON

Silicon is at the head of the group and corresponds to Carbon on the opposite extremity of the swing of the pendulum. It has eight funnels containing a group of five Anu, B5, and four ovoids in a circle, Si15, but no central sphere of any kind. All the funnels are alike and open on the faces of an octahedron. Fig. 131.

Silicon = 8(B5+4Si15)

8 funnels of 65 Anu	=	520	Anu
Total	=	520	Anu

Number weight $\frac{520}{18}$ = 28.88

ATOMIC NO. 32.

GERMANIUM

Central globe. In this case the funnels radiate from a central globe formed of two intersecting tetrahedrons, 2Ad24. These tetrahedrons enclose a tiny globe of four Anu. Fig. 131.

Funnels. There are eight similar funnels each consisting of four segments. The segments are similar and contain three ovoids Ge11 and an Ad6. Thus the segments each contain 39 Anu. This group, Ge39, occurs frequently.

Germanium = (Be4+2Ad24)+8(4Ge39)

Central globe	=	52	Anu
8 funnels each 156 Anu	=	1248	,,
Total	=	1300	Anu

Number weight $\frac{1300}{18}$ = 72.22

TIN

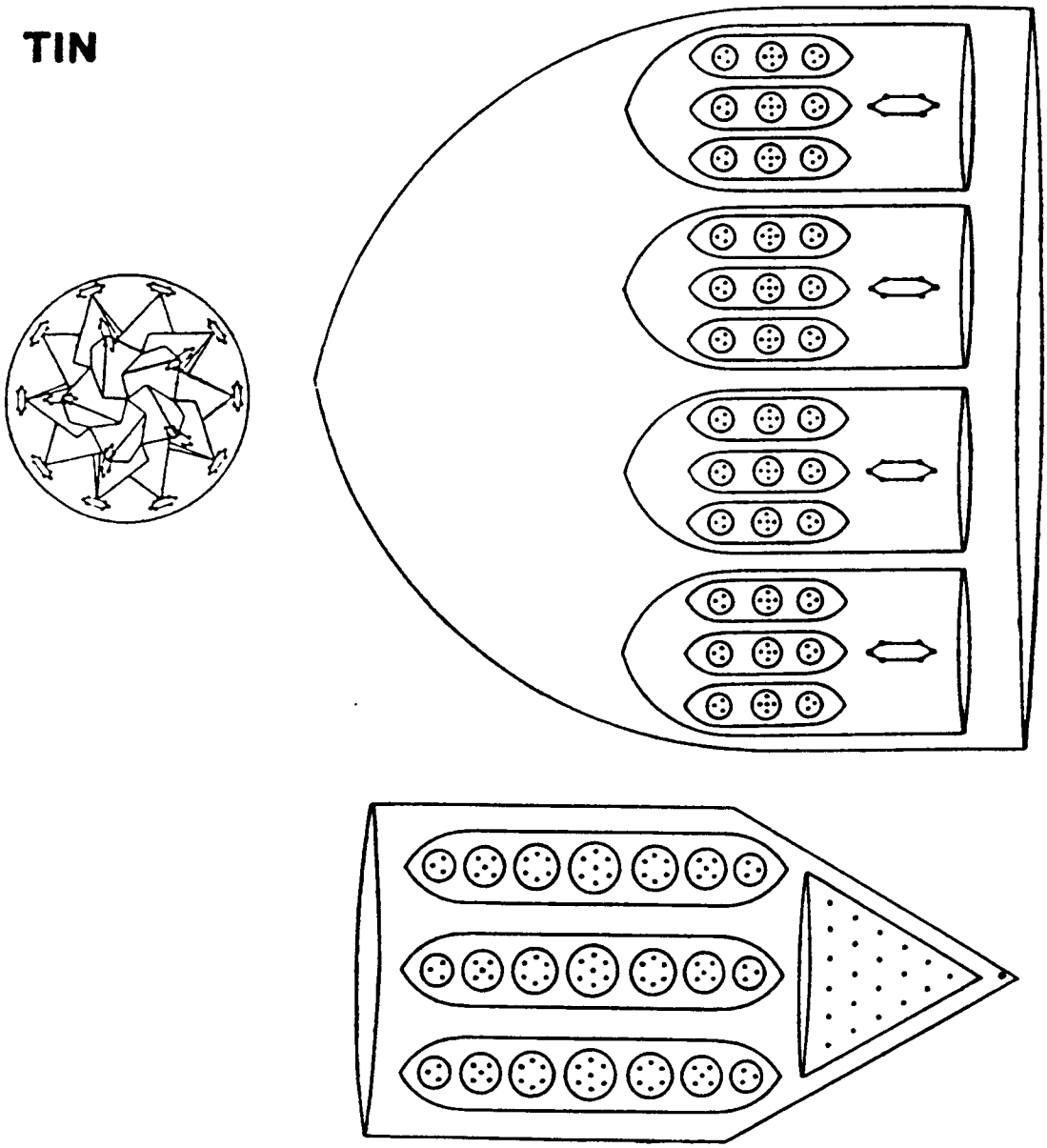


FIG. 132. TIN

ATOMIC NO. 53.

TIN

Central globe. The central globe consists of the five interpenetrating tetrahedrons, Ne120. Tin omits the eight Anu at the centre found in Titanium. Fig. 132.

Funnels. The funnels of Tin are similar to those of Germanium and contain four segments of Ge39, making a total of 156 Anu.

Spikes. To make room for the necessary increase in the number of Anu, Tin adopts the system of spikes met with in Zinc and other elements. These spikes radiate from the central globe but are only six in number. They point to the corners of the octahedron. In each spike there are three pillars and a cone. The pillars, Sn35, are new in detail though not in principle. They consist of small globes containing 3, 5, 6, 7, 6, 5, 3. Anu respectively. The cone at the top of the spike has 21 Anu and is identical with the cone in Silver, Ag21. The total number of Anu in the spike is 126.

Tin = Ne120+8 (4Ge39)+6Sn126

Central globe	=	120	Anu
8 funnels each 156 Anu	=	1248	„
6 spikes each 126 Anu	=	756	„
Total	=	2124	Anu

Number weight $\frac{2124}{18} = 118.0$

ATOMIC NO. 65. TERBIUM

This element resembles Tin and Lead. It was found in solder.

Central globe. This is similar to that of Tin, being composed of Ne120. Fig. 133.

Funnels. The eight similar funnels each contain four Ge39, two Mo46 and one I.7, making a total of 255 Anu. Fig. 134.

Spikes. There are six spikes similar to those of Tin, each composed of Sn126. Fig. 134.

Terbium = Ne120+8 (4Ge39+2Mo46+I.7)+6Sn126

Central globe	= 120	Anu
8 funnels of 255 Anu	= 2040	"
6 spikes of 126 Anu	= 756	"
Total	= 2916	Anu

Number weight $\frac{2916}{18}$ = 162.00

TERBIUM

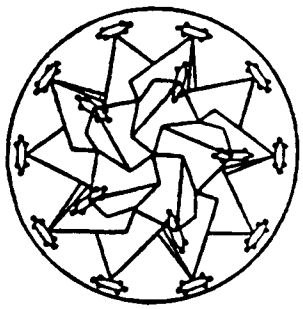


FIG. 133. TERBIUM CENTRE, Ne120

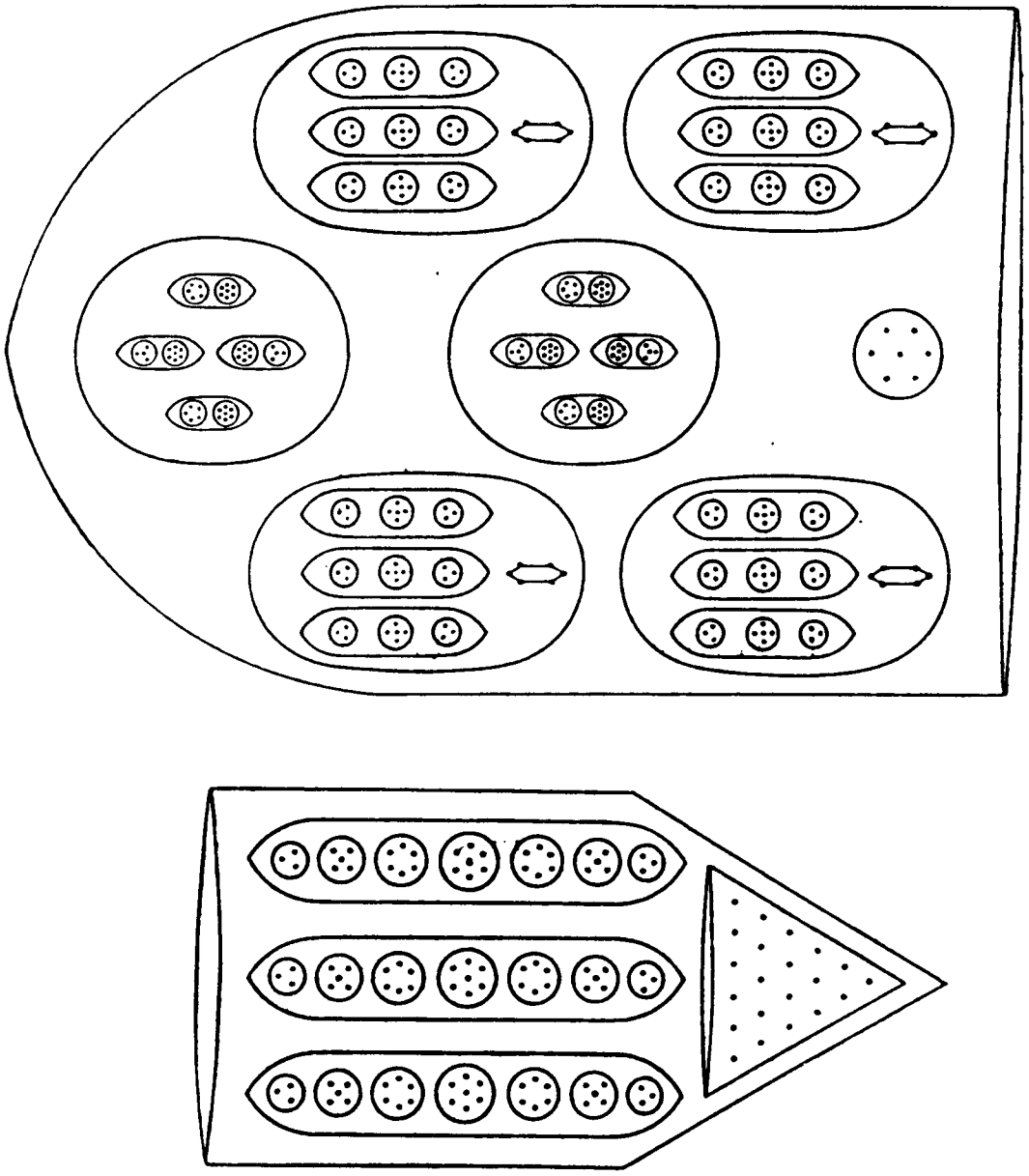


FIG. 134. TERBIUM, FUNNEL AND SPIKE

ATOMIC NO. 82

LEAD

Central globe. The central globe in Lead is similar to that of Thallium and Bismuth. It is made up of the group Ce27 at the centre, surrounded by 20 segments each of Ba33, making the total Tl.687. Fig. 135.

Funnels. Lead has no spikes but has eight funnels of two types. Some of the constituents of the spikes have been used in the funnels. Fig. 136.

Type A contains Ca160, one Mo46, four pillars from the Tin spike, Sn35, and finally, at the mouth of the funnel, there is a sphere Pb31. The total makes up 377 Anu.

Type B contains Ca160 and Mo46. It adds 4 Ge39 groups and an ovoid Pb21 at the mouth of the funnel. The total makes up 383 Anu.

Lead = Tl.687+4(Ca160+Mo46+4Sn35+Pb31)
+4(Ca160+Mo46+4Ge39+Pb21)

Central globe	=	687	Anu
4 funnels each 377 Anu	=	1508	„
4 funnels each 383 Anu	=	1532	„
Total	=	3727	Anu

Number weight $\frac{3727}{18} = 207.05$

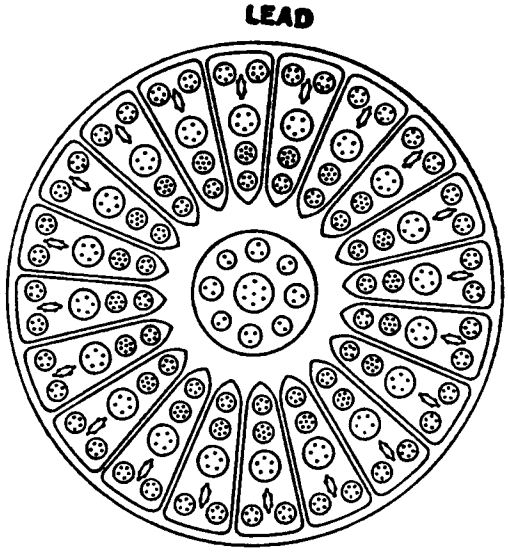


FIG. 135. LEAD CENTRE, Tl.687

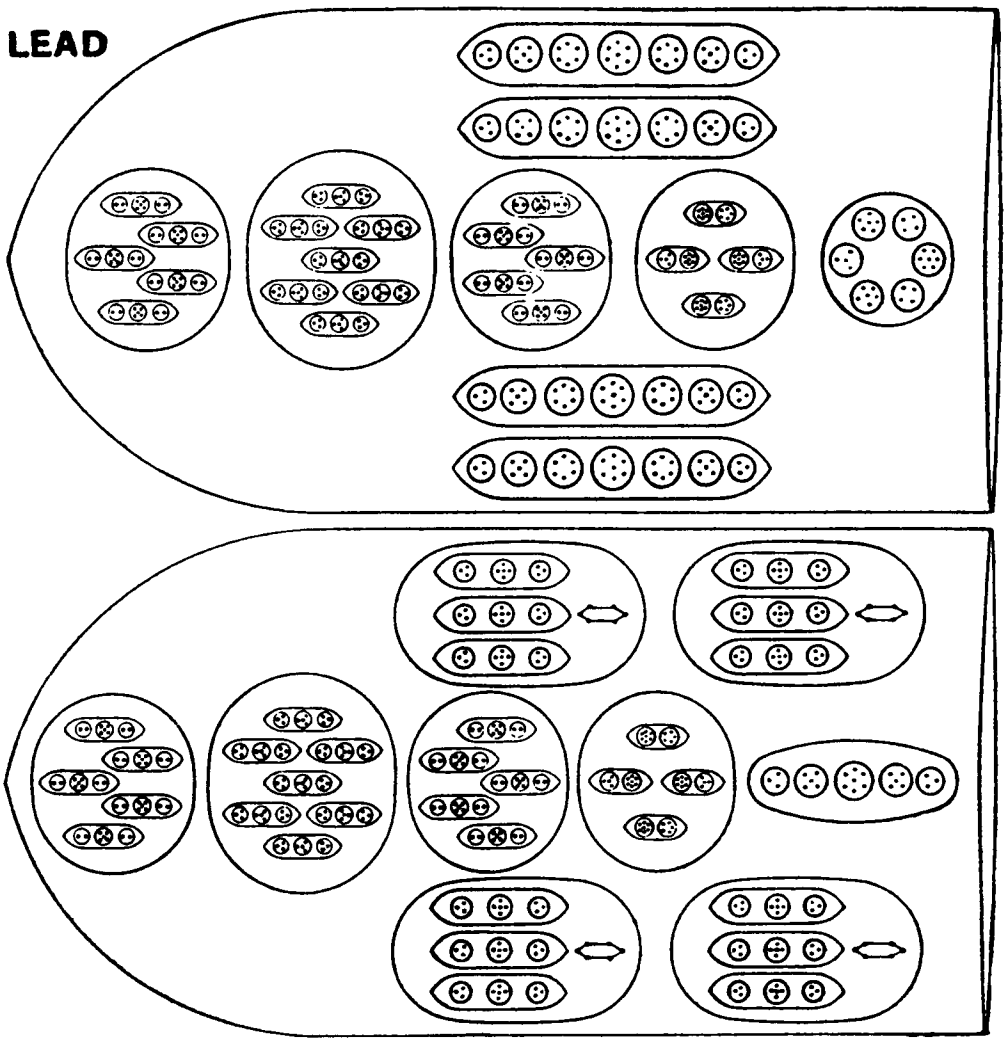


FIG. 136. LEAD FUNNELS

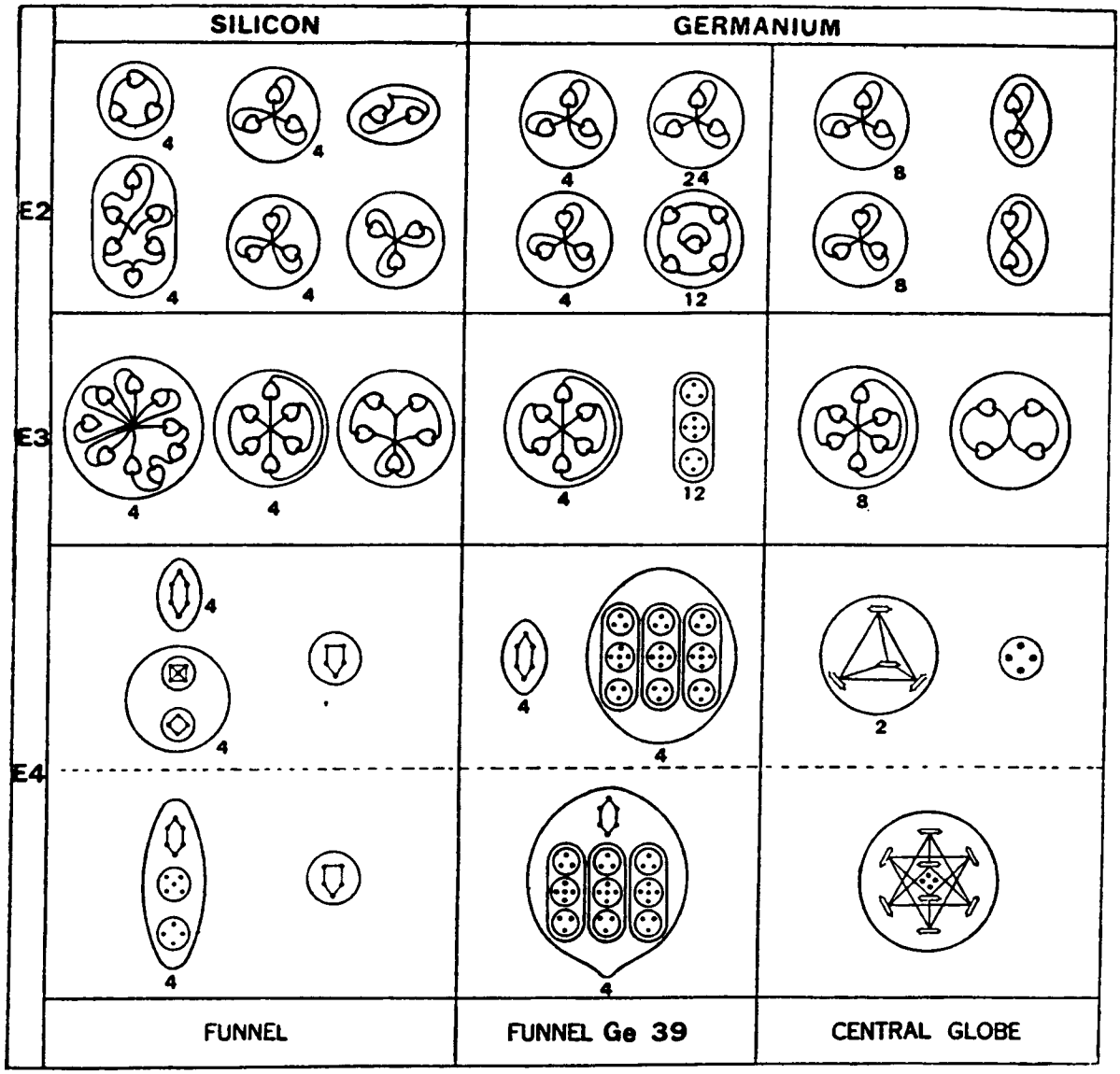


FIG. 137. DISINTEGRATION OF SILICON AND GERMANIUM

DISINTEGRATION OF OCTAHEDRON GROUP B

DISINTEGRATION OF SILICON

On the E4 level the four ovoids Si15 and the B5 are first liberated from the funnels. The four Ad6 then escape from their ovoids, leaving the quintet and quartet together in a sphere, as shown in Fig. 137.

On the E3 level the quintet and quartet join together to form a group of nine Anu. The Ad6 gives its usual sextet and the B5 a quintet.

On the E2 level the group of nine Anu divides into a sextet and a triplet, the Ad6 sextet gives two triplets and the quintet a triplet and a duad.

DISINTEGRATION OF GERMANIUM

Funnels. The four large ovoids, Ge39, in the funnels are first set free on the E4 level. Then the cigar Ad6 bursts its way through and goes along its accustomed path. The three groups, Ge11, are left in the ovoids.

On the E3 level the Ad6 form sextets while the Ge11 are set free.

On the E2 level these form triplets and a quintet as shown.

The Central globe. The globe is first liberated and then the two tetrahedrons 2Ad24 separate and free the little sphere of four Anu, Be4. These four Anu give the Sodium cross also found in Titanium.

On the E3 level the Ad24 break up into sextets and the Be4 gives a quartet.

On the E2 level these give triplets and duads. Fig. 137.

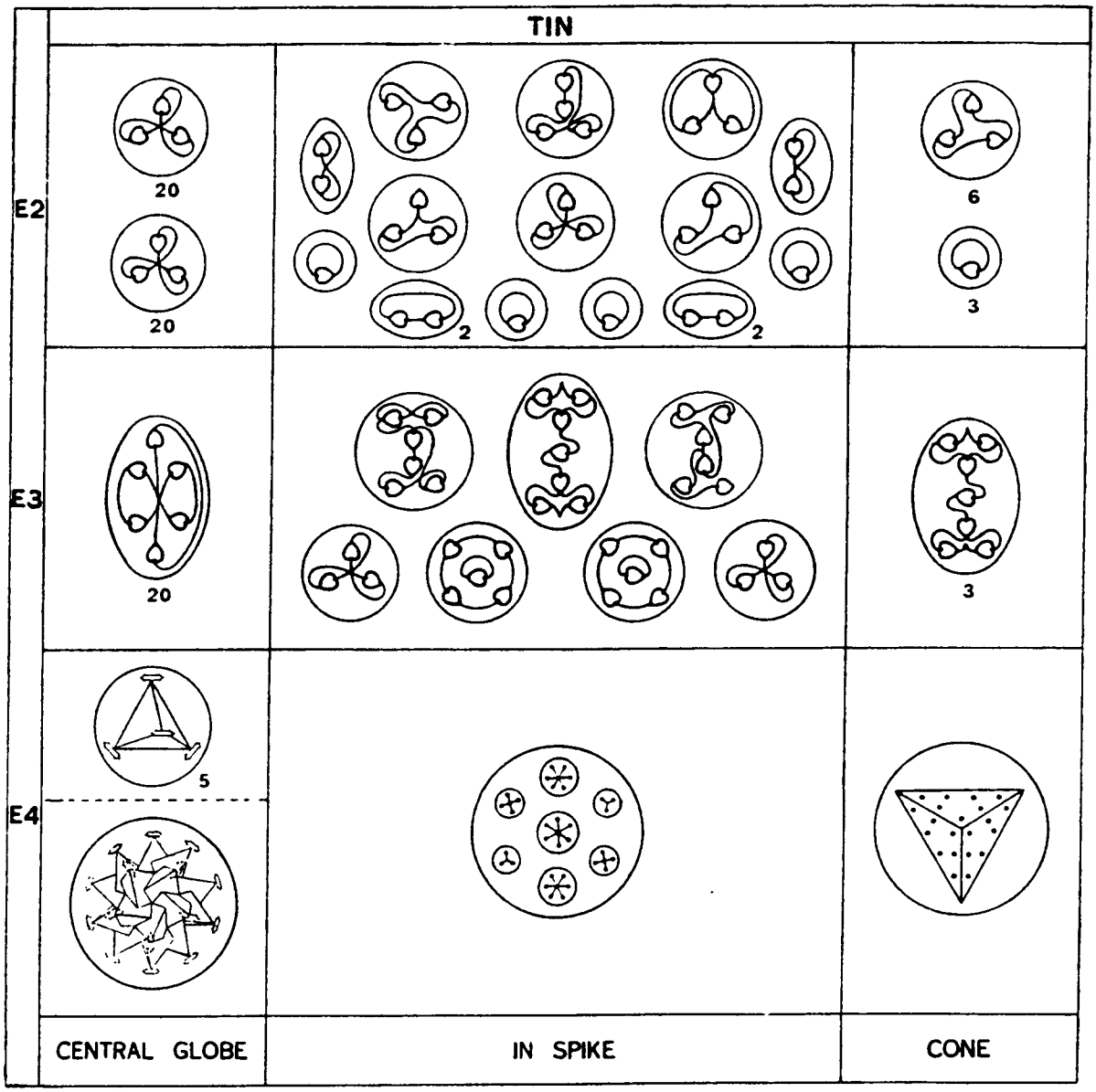


FIG. 138. DISINTEGRATION OF TIN

DISINTEGRATION OF TIN

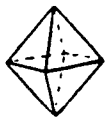
Funnels. The funnels are exactly like those of Germanium and disintegrate as shown under Germanium. Fig. 137.

Central globe. The central globe, Ne120, is first liberated on the E4 level. It then breaks up into its five tetrahedrons, 5Ad24. On the E3 level these tetrahedrons each give four sextets, and these sextets each give two triplets on the E2 level. Fig. 138.

Spikes. The three pillars, Sn35, are liberated on the E4 level and become spheres, the single septet being at the centre and the other six bodies circling round it on differing planes. On the E3 level these seven spheres are liberated and form groups as shown in Fig. 138. They disintegrate further on the E2 level giving a quartet, triplets, duads and units.

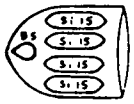
The cone in the spike, Ag21, is also set free on the E4 level. This is really a pyramid as in Silver. On the E3 level three septets are formed and on the E2 level six triplets and three units.

Fig. 139 shows the Octahedron Group B in a condensed form, from which the relationships in the group may be studied.

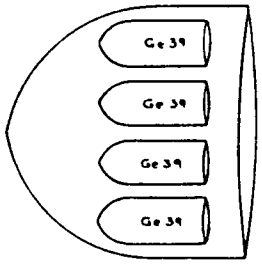


OCTAHEDRON GROUP B

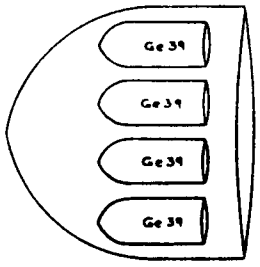
SILICON

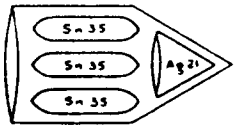


GERMANIUM

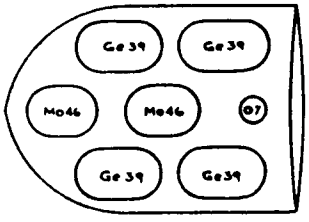


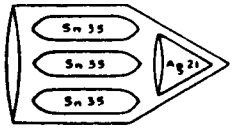
TIN



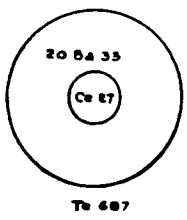


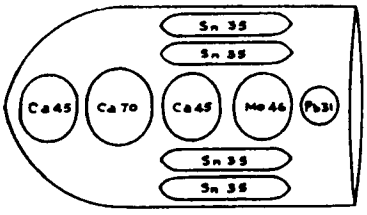
TERBIUM





LEAD





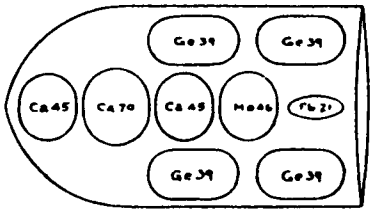


FIG. 139 THE OCTAHEDRON GROUP B