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New Species of the Siphonophoran Genus Lensia *Totton*, 1932.

By A. K. TOTTON, Department of Zoology, British Museum (Natural History).

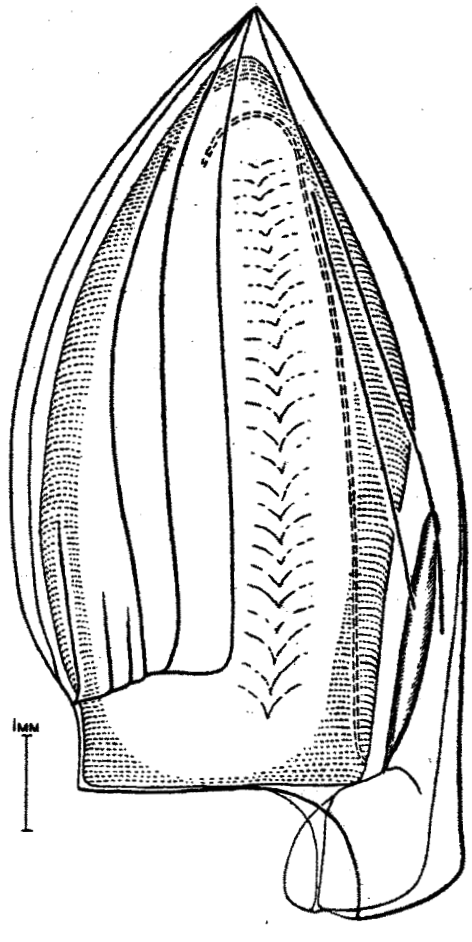
LARGE numbers of specimens of small and unfamiliar Siphonophora Calycophoræ, probably all diphyids, have been picked out of catches made by 'Discovery II' in the Atlantic in the last ten years, and out of catches made by the ill-fated 'Carnegie' on her last cruise. This paper deals briefly with new species that can for convenience be grouped with *Diphyes subtiloides* Lens and van Riemsdijk, 1908, the genotype of *Lensia* Totton, 1932. It is not pretended that the seventeen species are all congeneric.

Six species of *Lensia* are already well known, *conoidea* Keferstein and Ehlers, 1860, *subtilis* Chun, 1886, *subtiloides* Lens and van Riemsdijk, 1908, *fowleri* Bigelow, 1911, *campanella* Moser, 1925, and *multicristata* Moser, 1925. I do not propose to mention them here. A seventh species, to which I give below a new name, was described and figured by Leloup in 1934 under the name *Lensia multicristata* Moser, forme *grimaldii* Leloup. Ten species of *Lensia* new to science are published here *, an eleventh

* I have commemorated some of the names of H.M. Ships which took part in the famous exploits at Montevideo, at Jössing Fjord, and in the first attack on Narvik by the Second Destroyer Flotilla on April 10, 1940.

having been recorded and named by Leloup in 1933 as *grimaldii* since the study of this group was started. Four of the new species are what may be called multicristate forms. It has not been possible as yet to associate correctly the anterior and posterior nectophores of all the species, nor are the posterior nectophores dealt with in this paper.

Fig. 1.



Lensia exeter, sp. n. ' Discovery ' Stn. 675, 750–500 m.

1. *Lensia exeter*, sp. n. (Figs. 1–3.)

Anterior nectophore :—Multistriate, five groups of three ridges and transverse oral ridge. Somatocyst long. Hydrœcium deep, open on ventral side.

Localities.—' Discovery ' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
100.....	TYF	2. x. 26	475 (–0)	1
1554.....	TYFB	28. iii. 35	1500–0	1
675.....	TYFV	26. v. 31	750–500	1

Fig. 2.

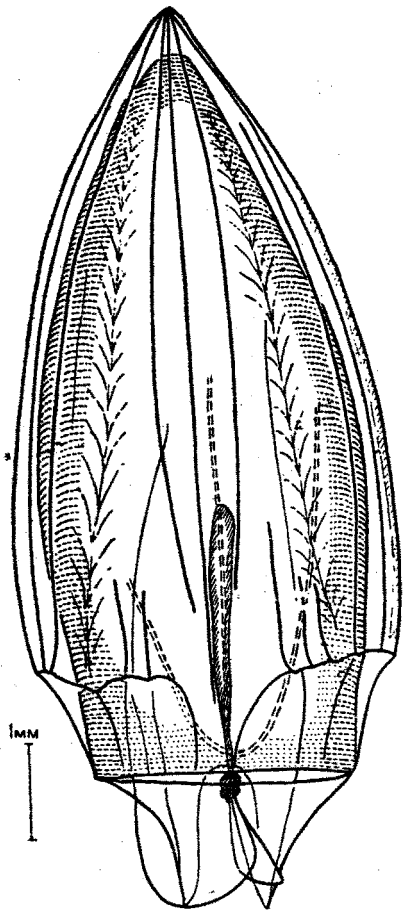


Fig. 3.

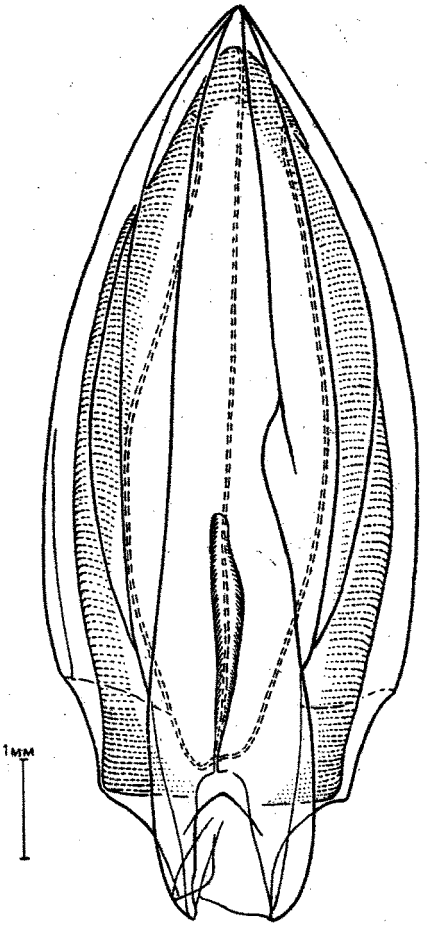


Fig. 2.—*Lensia exeter*, sp. n. ' Discovery ' Stn. 675, 750–500 m. Dorsal view.
Fig. 3.—*Lensia exeter*, sp. n. ' Discovery ' Stn. 675, 750–500 m. Ventral view.

2. *Lensia ajax*, sp. n. (Figs. 4–5.)

Anterior nectophore :—5 groups of 3 (sometimes 2) longitudinal ridges. No transverse oral ridge. One of dorsal group of 3 ridges often incomplete orally, or even

absent. A rudimentary ridge (or 2) present in the oral region between dorsal and lateral groups. Ridges of the two ventro-lateral groups irregular and often incomplete. Somatocyst short, oblique, spindle-shaped. Hydrœcium not extending above level of velum, open ventrally.

Fig. 4.

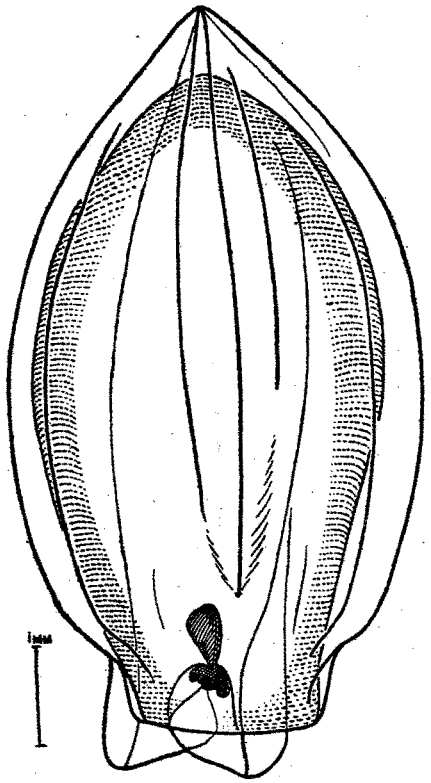


Fig. 5.

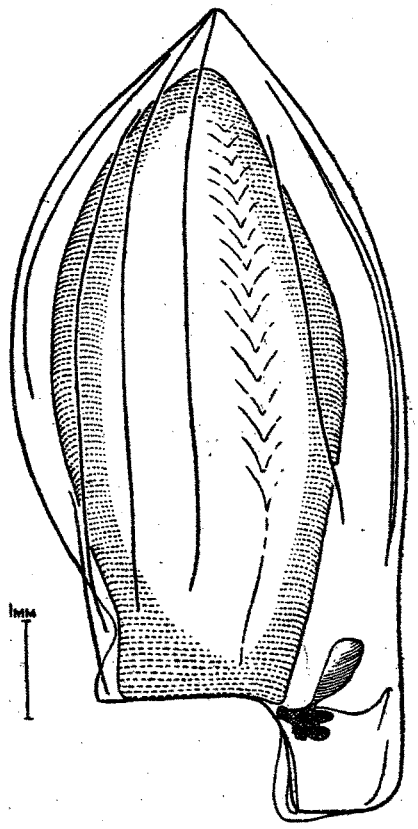


Fig. 4.—*Lensia ajax*, sp. n.—' Discovery ' Stn. 282, 300–0 m. Dorsal view.
Fig. 5.—*Lensia ajax*, sp. n. ' Discovery ' Stn. 282, 300–0 m.

Localities.—' Discovery ' Stations :—

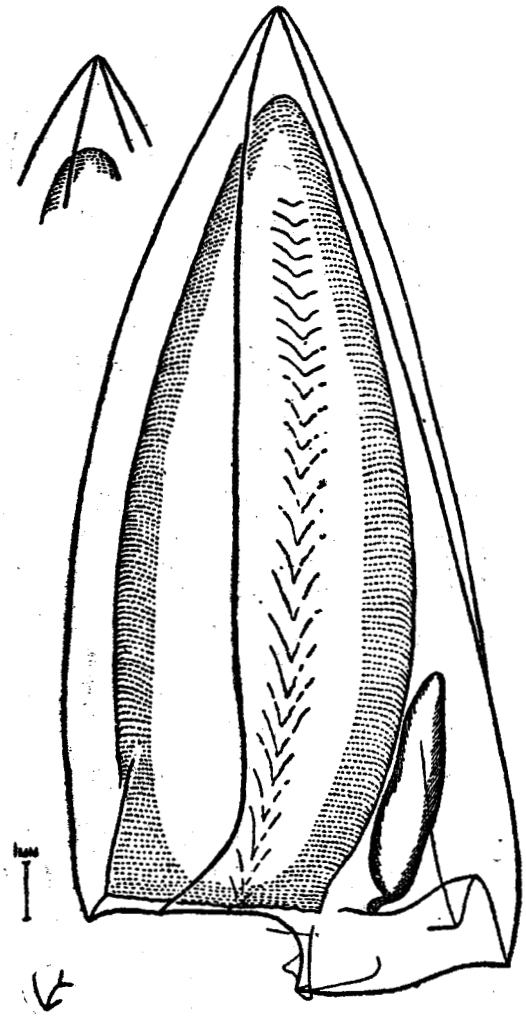
Station.	Net.	Date.	Depth in m.	Specimens.
282.....	TYF	12. viii. 27	300–0	35
100.....	TYF	2. x. 21	475 (–0)	1

The specimen from St. 100 has four ridges in each group beside the two rudimentary orals on each side. It appears to be a variety of *L. ajax*.

3. *Lensia achilles*, sp. n. (Figs. 6–7.)

Anterior nectophore :—Five ridges, the dorso-laterals bending dorsad orally. Vault of hydrœcium on a level with velum, a notch present at the baso-ventral edge. Somatocyst broadly spindle-shaped. A deep-water species, coloured deep or bright orange in life.

Fig. 6.

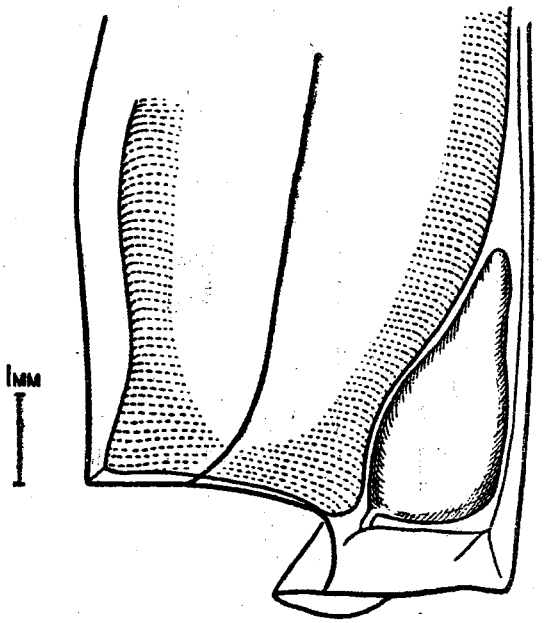


Lensia achilles, sp. n. ' Discovery ' Stn. 85, 2000 (–0) m. Holotype.

Localities.—This species was found at three ' Discovery II ' stations off S.W. Africa :—Stn. 85, 33° 07′ 40″ S., 4° 30′ 20″ E., in an open haul from 2000 metres, 2 ant. nects. The salinity at 2000 m. was 34·88 per mille, and the temperature 2·74° C., but the specimens were not

taken in a closing net. St. 100 B, closing net from 900–1000 m., 3–4. x. 1926, 2 ant. nects. St. 100 C, 33° 20′ to 33° 46′ S., 15° 18′ to 15° 08′ E., in a closing net from 2500–2000 m., 5 ant. nects. No hydrological observations are reported for that station. The salinity at that depth at a station made 20 miles away in May, 1939, was 34·88 per mille, and the temperature 2·48°-2·73° C. St. 89, 34° 05′ 15″ S., 16° 00′ 45″ E., in an open haul from 1000 m. to surface. At 1000 m. the salinity was 34·38 per mille, and the temperature 3·52° C.

Fig. 7.



Lensia achilles, sp. n. ' Discovery ' Stn. 100 B, 900–1000 m. Lateral view of base of nectophore.

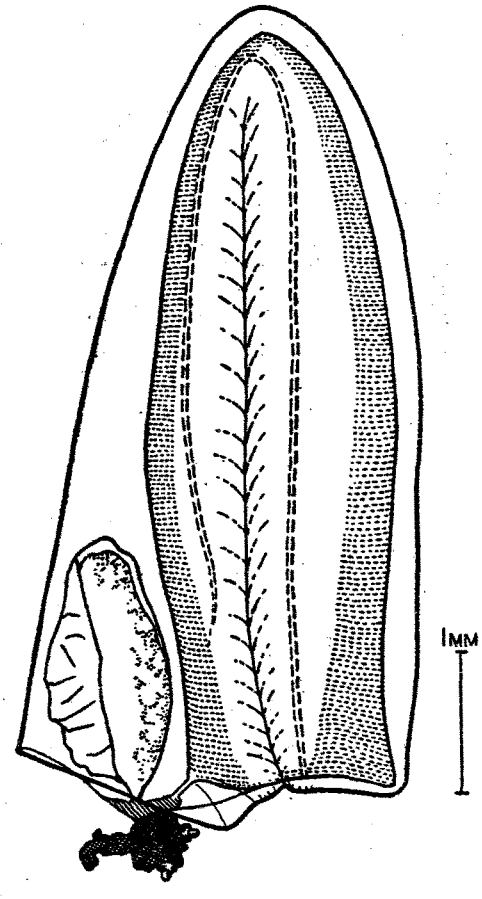
Another poor specimen was taken at St. 1571, off E. Africa, between Durban and the southern point of Madagascar at a depth of 1400–1000 m. No data about temperature or salinity are available.

4. *Lensia cossack*, sp. n. (Figs. 8–9.)

Anterior nectophore :—No crests on longitudinal ridges, except for a slight dorsal one. Ventral ridges vestigial. Basal facet horse-shoe shaped, with slight ventral notch.

No hydrœcium. Mouth-plates very short. Somatocyst ovoid, oblique, one-third the length of the nectophore when well preserved. A large specimen, 11·6 mm. in length, from St. 672 is the holotype.

Fig. 8.



Lensia cossack, sp. n. 'Carnegie Cruise' VII, Stn. 103.

Localities.—Specimens were taken, never more than in twos and threes, by 'Carnegie' at the following twenty-two stations :—

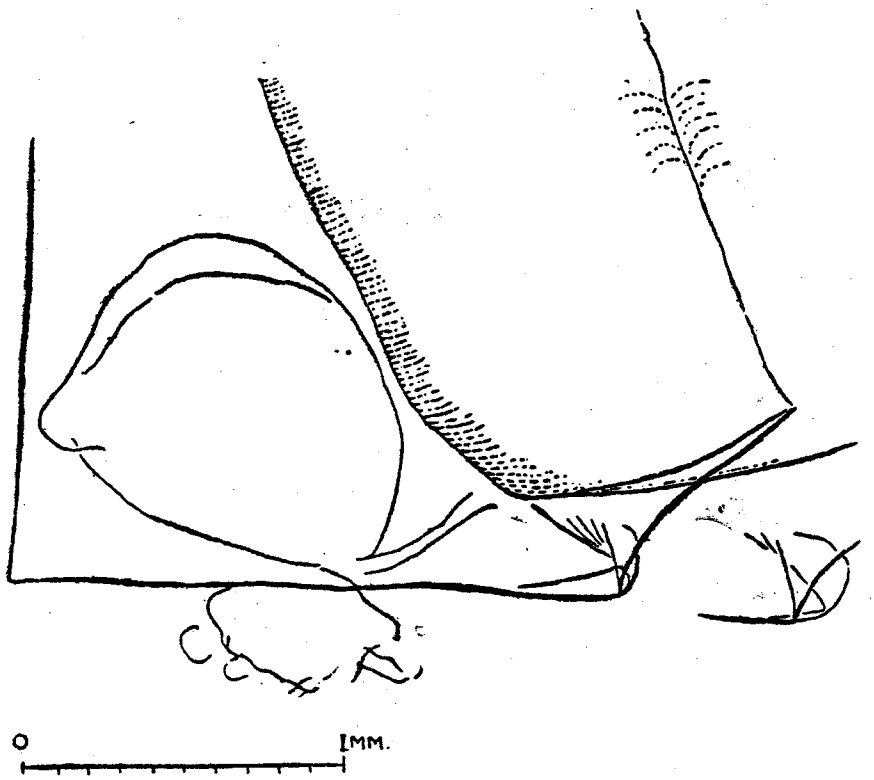
St. 16 : S 107 : B.4311	St. 104 : S 622 : B.6856
St. 24 : S 156 : B.4543	St. 105 : S 628 : B.6886
St. 49 : S 279 : B.7428	St. 105 : S 629 : B.6898
St. 52 : S 301 : B.7546	St. 109 : S 655 : B.7915
St. 55 : S 325 : B.7685	St. 109 : S 656 : B.7927
St. 56 : S 330 : B.7718	St. 111 : S 670 : B.7983
St. 82 : S 497 : B.6288	St. 113 : S 682 : B.8044
St. 87 : S 522 : B.6391	St. 137 : S 837 : B.5498
St. 88 : S 527 : B.6412	St. 138 : S 844 : B.5525
St. 91 : S 541 : B.6491	St. 139 : S 850 : B.5570
St. 103 : S 617 : B.6835	St. 155 : S 966 : B.5871

'Discovery' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
100 C.....	TYF	3. x. 26	260–310	1
282.....	TYF	12. viii. 27	300–0	6
701.....	TYFB	16. x. 31	242–0	6
708.....	TYFB	23. x. 31	208–0	3
709.....	TYFB	24. x. 31	216–0	4
711.....	TYFB	27. x. 31	290–0	1
713.....	TYFB	29. x. 31	200–0	1
968.....	100B	19. ix. 32	86–0	5
1371.....	N100B	19. v. 35	146–0	4
1372.....	N100B	20. v. 34	102–0	2
1567.....	TYFB	10. iv. 35	1350–0	1
1571.....	TYFB	21. iv.	500–0	1
672.....	TYFB	23. iv.	200–0	1
673.....	TYFB	25. iv.	340–0	1
680.....	TYFB	30. iv	260–0	8
681.....	TYFV	1. v.	250–0	4
681.....	TYFV	1. v.	500–250	1
682.....	TYFB	1. v	375–0	3
684.....	TYFV	3. v. 31	250–0	4
693.....	TYFV	10. v. 31	250–0	2
694.....	TYFB	10. v. 31	210–0	1
698.....	TYFB	13. v. 31	470–0	1
968.....	N100B	19. ix. 32	250–106	1

Stations 672–698 were all north of the subtropical convergence, but no attempt has been made yet to analyse the distribution of catches.

Fig. 9.

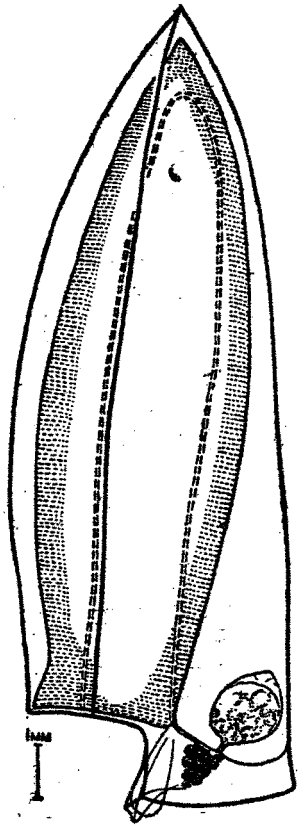


Lensia cossack, sp. n. 'Discovery' Stn. 282, 300–0 m. Lateral view of base of nectophore.

5. *Lensia hardy*, sp. n. (Fig. 10.)

Anterior nectophore :—Five complete longitudinal ridges. Hydrœcium more extensive on dorsal side than on ventral. Here it does not reach the level of the velum, except where its anterior wall slopes off into the ventral facet. Somatocyst shortly stalked, globular, tending to be bifid at apex.

Fig. 10.



Lensia hardy, sp. n. ' Discovery ' Stn. 672, 200–0 **m.**

The species differs from *L. fowleri* in : (1) having mouth-plates more than half the diameter of mouth in length ; (2) having an extensive notch in the baso-ventral ridge ; (3) somatocyst not reaching base ; (4) having a bigger hydrœcial cavity, which extends below the base of the somatocyst.

Localities.—' Carnegie,' St. 25 : sample 162 : bottle 4564 ; 1 specimen.

'Discovery' Stns.—224 specimens were taken as follows :—

Station.	Net.	Date.	Depth in m.	Specimens.
83.....	N200H	21. vi. 26	650 (–0)	1
85.....	N450H	23. vi. 26	2000 (–0)	2
89.....	TYF	28. vi. 26	1000 (–0)	7
100 C	TYF	3. x. 26	260–310	18
100 D	TYF	2. x. 26	625–675	3
101.....	N450	15. x. 26	350–400 (–0)	1
102.....	N70V	28. x. 26	100–50	3
102.....	N70V	28. x. 26	250–100	4
247.....	TYF	13. vi. 27	110–115 (–0)	2
256.....	TYF	23. vi. 27	850–1100 (–0)	1
266.....	TYF	21. vii. 27	200 (–0)	16
450.....	N100B	12. x. 30	150–0	2
672.....	TYFB	23. iv. 31	200–0	3
714.....	TYFB	30. x. 31	246–0	69
717.....	TYFB	2. xi. 31	212–0	17
845.....	N100B	9. iv. 32	268–?	2
847.....	N100B	11. iv. 32	270–196	3
1370.....	N100B	18. v. 34	113–0	21
1749.....	TYFB	24. iv. 36	450–0	4
69.....	N70H	25. v. 26	45(–0)	6
670.....	TYFB	21. iv. 31	470–0	1
671.....	TYFV	22. iv. 31	150–0	1
671.....	TYFV	22. iv. 31	1000–0	1
671.....	TYFV	22. iv. 31	500–250	1
671.....	TYFB	23. iv. 31	360–0	1
716.....	TYFB	1. xi. 31	212–0	15
839.....	100B	29. ii. 32	132–0	3
401.....	TYF	22. v. 30	1250–1300	14
453.....	N100B	16/17. x. 30	164–0	2

The surface water is subtropical at all of these stations except 69, 670, 671, 716, and 839, which are at the northern extremity of the subantarctic zone. At Station 401 the water at 1200–1300 m. would probably be Antarctic intermediate water. Station 453 is definitely Antarctic.

6. *Lensia hunter*, sp. n. (Figs. 11–12.)

Anterior nectophore :—Seven longitudinal ridges. The dorso-laterals do not reach the velar edge, laterals do not reach the apex but do reach base. The hydrœcium extends forward to and, on the ventral side, beyond the level of the velum, its anterior wall sloping off gradually into the ventral facet. The somatocyst is generally bilobed and asymmetrical, the left side longer than the right, ovoid and stalked. Pedicular canal horizontal. Mouth-plates without hook.

Localities.—'Carnegie,' Cruise VII, St. 64, 31° 54′ S., 88° 17′ W., 1000 m., two ant. nectophores in poor condition.

Fig. 11. Fig. 12.

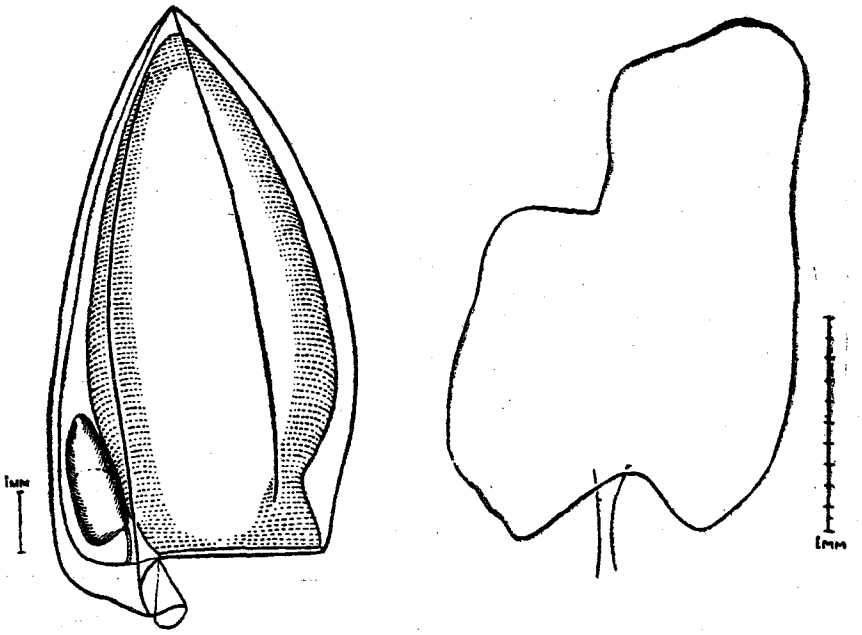


Fig. 11.—*Lensia hunter*, sp. n. 'Discovery' Stn. 1571, 1400–1000 m.
Fig. 12.—*Lensia hunter*, sp. n. 'Discovery' Stn. 1571, 1400–1000 m. Ventral view of somatocyst.

'Discovery' Stations.—

Station.	Net.	Date.	Depth in m.	Specimens.
78.....	TYF	12. vi. 26	1000 (–0)	24
87.....	TYF	25. vi. 26	1000 (–0)	24
89.....	TYF	28. vi. 26	1000 (–0)	7
100.....	TYF	2. x. 26	475 (–0)	2
100 A.....	TYF	2. x. 26	625–675	19
100 B.....	TYF	3/4. x. 26	900–1000	13
100 B.....	TYF	3/4. x. 26	300–1000	7
100 C	TYF	4. x. 26	2500 (–0)	2
100 C	TYF	4. x. 26	2500–2000	7
675.....	TYFV	26. iv. 31	750–500	1
675.....	TYFV	26. iv. 31	1000–750	11
1569.....	TYFB	12. iv. 35	1200–500	7
1571.....	TYFB	21. iv. 35	1400–1000	3

7. *Lensia hotspur*, sp. n. (Figs. 13–16.)

Anterior nectophore:—Nearly twice the size of *subtiloides*, the length being about 8 mm. Five complete longitudinal ridges. The somatocyst is oblique, ovate and

shortly stalked. The hydrœcium is very shallow, lying entirely below the level of the velum. The inner edges of the mouth-plate do not project below the outer ones. The pedicular canal is descending. A species allied to *L. conoidea* K. & E.

Localities.—'Carnegie' Stations :—

Station.	Sample.	Bottle.	Specimens.
35.....	205	4792	5
36.....	214	4871	1
41.....	237	7226	2
42.....	243	7273	1
75.....	464	6135	1

'Discovery' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
89.....	TYF	28. vi. 26	1000 (–0)	9
100.....	TYF	2. x. 26	475 (–0)	5 dozen
100 A.....	TYF	2. x. 26	625–675	8
100 B.....	TYF	30. ix–1. x. 26	0–5	8 dozen
100 C	TYF	1. x. 26	0–5	3
100 C	TYF	3. x. 26	260–310	7
100 C	TYF	4. x. 26	2500–2000	4
102.....	N70V	28. x. 26	50–0	9
102.....	N70V	28. x. 26	100–50	2
282.....	TYF	12. viii. 27	300–0	3 dozen
446.....	N100B	9. x. 30	106–0	4
448.....	N100B	10. x. 30	161–0	1
671.....	TYFV	27. iv. 31	2000–0	2
673.....	TYFB	25. iv. 31	340–0	2
677.....	TYFV	27. iv. 31	250–0	1
679.....	TYFV	29. iv. 31	250–0	2
682.....	TYFB	1. v. 31	375–0	3
687.....	TYFV	5. v. 31	250–0	1
690.....	TYFV	7. v. 31	250–0	7
691.....	TYFB	8. v. 31	400–0	1
693.....	TYFV	10. v. 31	250–0	1
694.....	TYFB	10. v. 31	210–0	1
698.....	TYFB	13. v. 31	470–0	3
699.....	TYFV	14. v. 31	250–0	1 dozen
702.....	TYFB	17. x. 30	236–0	19
708.....	TYFB	23. x. 31	208–0	3
709.....	TYFB	24. x. 31	216–0	2
842.....	N100B	3. iii. 32	155–0	3
967.....	100B	19. ix. 32	306–145	1
1371.....	N100B	19. v. 31	146–0	1

Fig. 13.

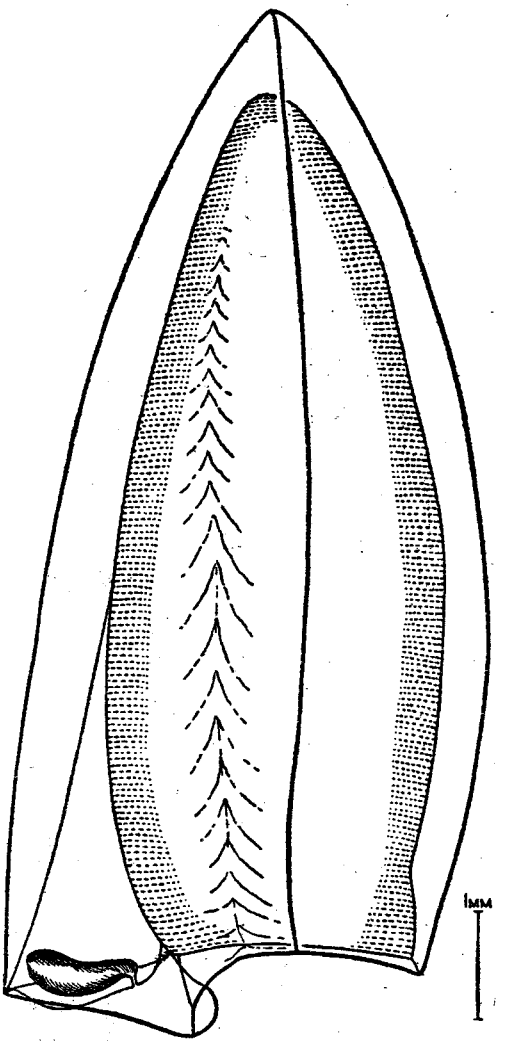


Fig. 14.

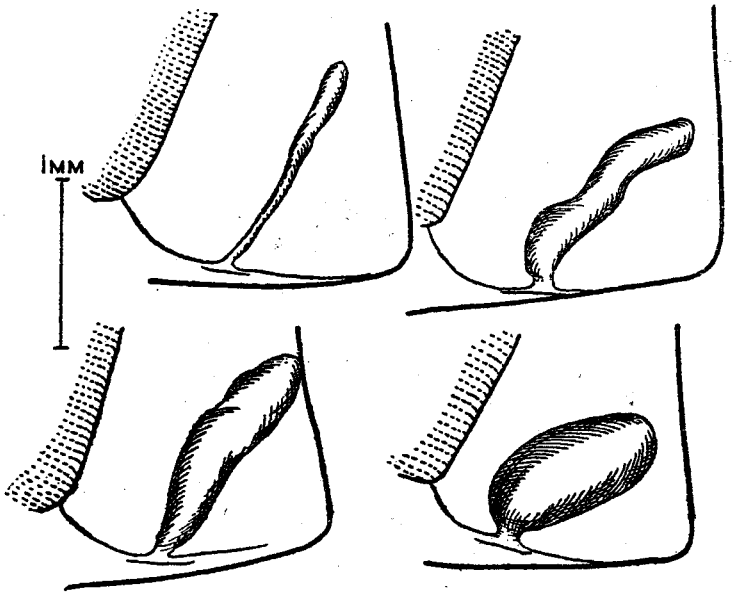


Fig. 13.—*Lensia hotspur*, sp. n. 'Carnegie' Cruise VII, Stn. 36.
Fig. 14.—*Lensia hotspur*, sp. n. 'Discovery' Stn. 100, 475 (–0) m. Lateral view of somatocysts.

Fig. 15.

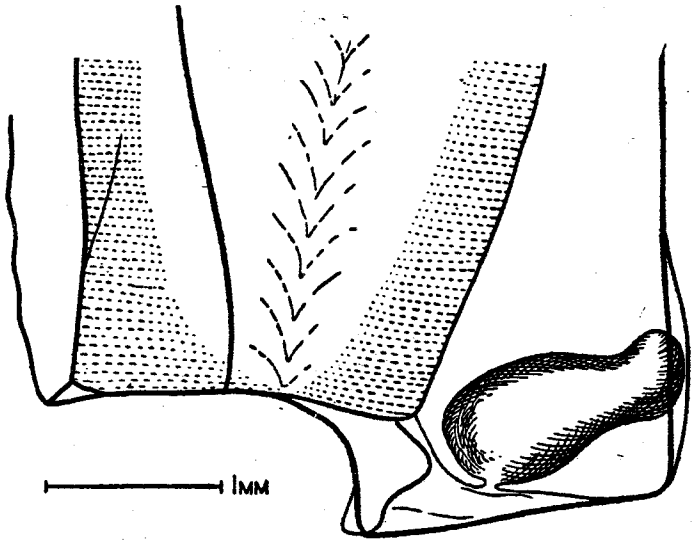


Fig. 16.

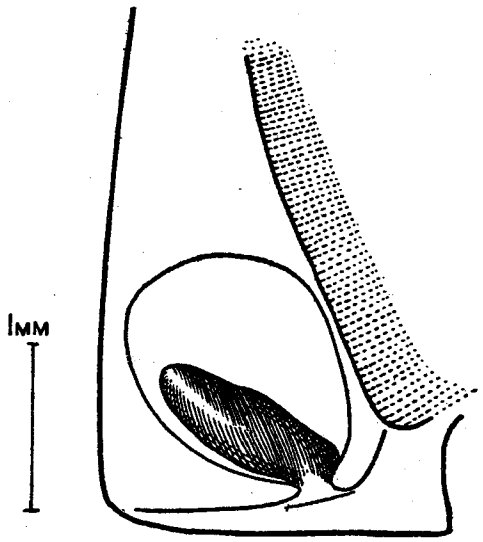


Fig. 15.—*Lensia hotspur*, sp. n. ' Discovery ' Stn. 89, 1000 (–0) m. Lateral view of base of nectophore.
Fig. 16.—*Lensia hotspur*, sp. n. ' Discovery ' Stn. 100 A, 0–5 m. Lateral view, showing former extent of somatocyst.

8. *Lensia havock*, sp. n. (Figs. 17–19.)

Anterior nectophore :—Seven complete ridges, laterals bending ventrad below to run onto mouth-plate. Hydrœcium extends up above level of velum. Ventral wall with pronounced slit extending up to upper limit of hydrœcium. Somatocyst spindle-shaped.

Two specimens taken by Dr. Beebe off Bermuda in 1931 were identified by me as belonging to a new species with seven ridges. In the paper which Beebe published under my name he wrongly called this species *multicristata* Moser, 1925, probably because it had seven ridges.

Localities.—Third Bermuda Oceanographic Expedition :—

Catalogue no.	Net.	Date.	Depth in m.	Specimens.
311780....	1258	17. viii. 31	1646	1
311415....	1195	3. ix. 31	1463	1

Further details will be found in 'Zoologica,' N.Y., xiii. nos. 1–3.

'Discovery' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
71.....	TYF	30. v. 26	2000 (–0)	1
78.....	TYF	12. vi. 26	1000 (–0)	2
85.....	N450H	23. vi. 26	2000 (–0)	1
89.....	TYF	28. vi. 26	1000–0	5
100 A....	TYF	2. x. 26	625–675	3
100B	TYF	3/4. x. 26	900–1000	8
100 C ...	TYF	4. x. 26	2500 (–0)	2
100 C ...	TYF	4. x. 26	2500–2000	4
401.....	TYF	22. v. 30	1250–1300	1
661.....	TYFV	2. iv. 31	1000–750	1
661.....	TYFV	2. iv. 31	3000–2000	3
666.....	TYFV	17. iv. 31	2000–1500	1
671.....	TYFV	21. iv. 31	1500–1000	2
1571.....	TYFB	21. iv. 35	1400–1000	2
1917.....	TYFB	3. xii. 36	1400–1000	1

Fig. 17.

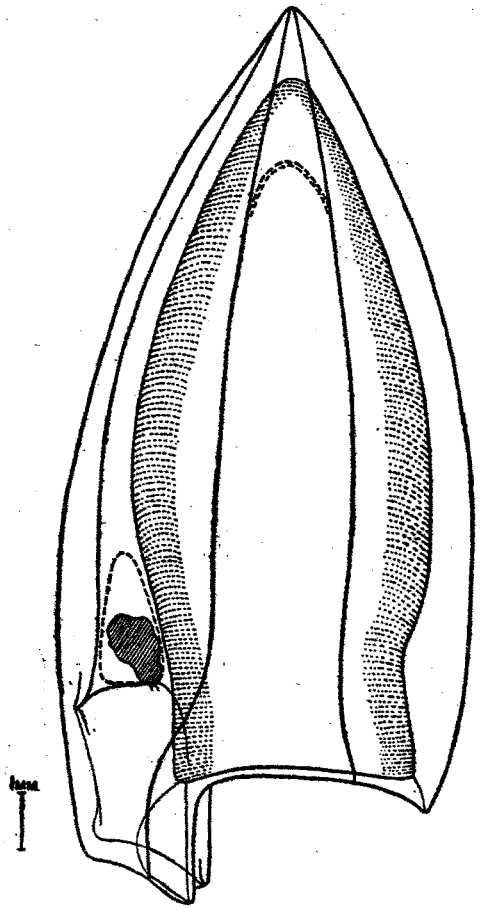


Fig. 18.

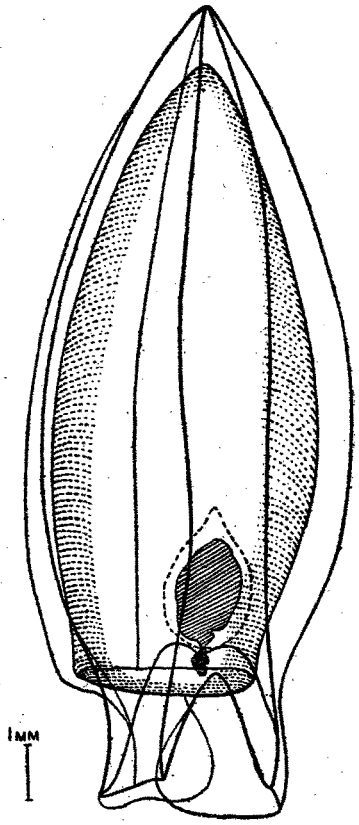


Fig. 19.

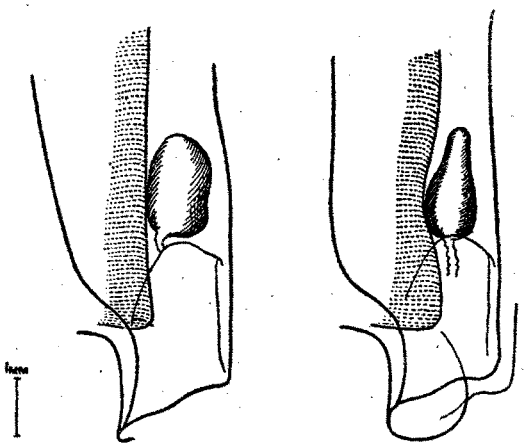
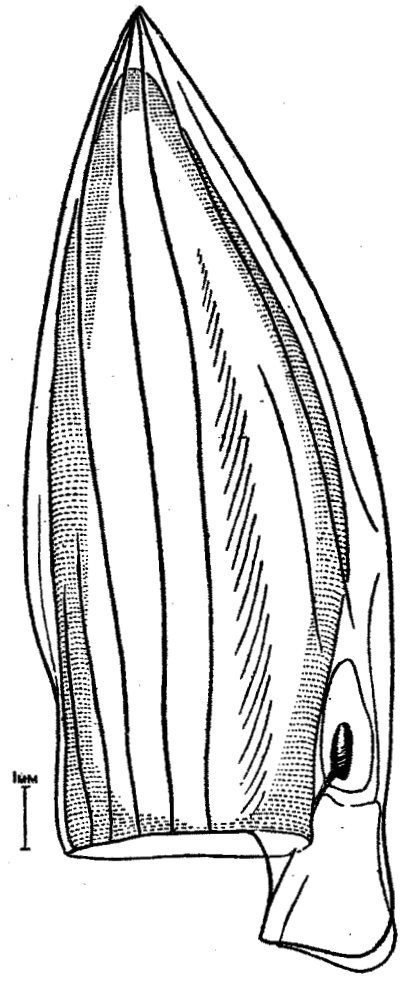


Fig. 17.—*Lensia havock*, sp. n. ' Discovery ' Stn. 1917, 1400–1000 m.
Fig. 18.—*Lensia havock*, sp. n. ' Discovery ' Stn. 100 C, 2500–0 m. Ventral view.
Fig. 19.—*Lensia havock*, sp. n. ' Discovery ' Stn. 100 B, 900–1000 m. Lateral view of somatocysts.

9. *Lensia hostile*, sp. n. (Figs. 20–22.)

Anterior nectophore :—Large, 15·5 mm. overall. Hydrœcium deep, an open slit on ventral side. Somatocyst heart-shaped, apex uppermost. Most of ridges uninterrupted from apex to oral edge, some incomplete, and only seen at oral end and in mid-region.

Fig. 20.



Lensia hostile, sp. n. ' Discovery ' Stn. 1743, 2100–1150 m.

A dorsal group of three or four ridges cut off from oral edge by two converging grooves, two dorso-lateral groups of 3 or 4, and two ventro-lateral groups of 3 or 4.

Localities.—'Discovery' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
89.....	TYF	28. vi. 26	1000 (–0)	1
1571.....	TYFB	21. iv. 35	1400–1000	2
1739.....	TYFB	17. iv. 36	3000–2000 (–0)	1
1743.....	N450B	20. iv. 36	2100–1150	1

Fig. 21.

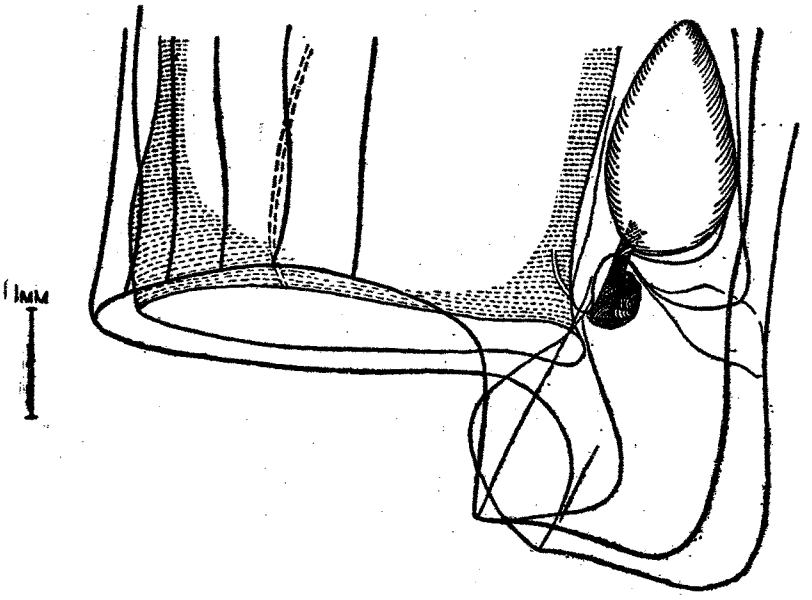


Fig. 22.

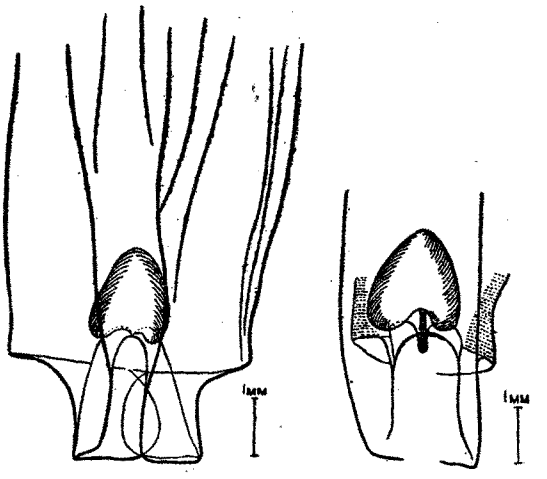


Fig. 21.—*Lensia hostile*, sp. n. 'Discovery' Stn. 1743, 2100–1150 m. Base of nectophore.

Fig. 22.—*Lensia hostile*, sp. n. 'Discovery' Stn. 1571, 1400–1000 m. Ventral views of base of nectophore and of hydrœcium and somatocyst.

10. *Lensia lelouveteau*, sp. n. (Figs. 23–25.)

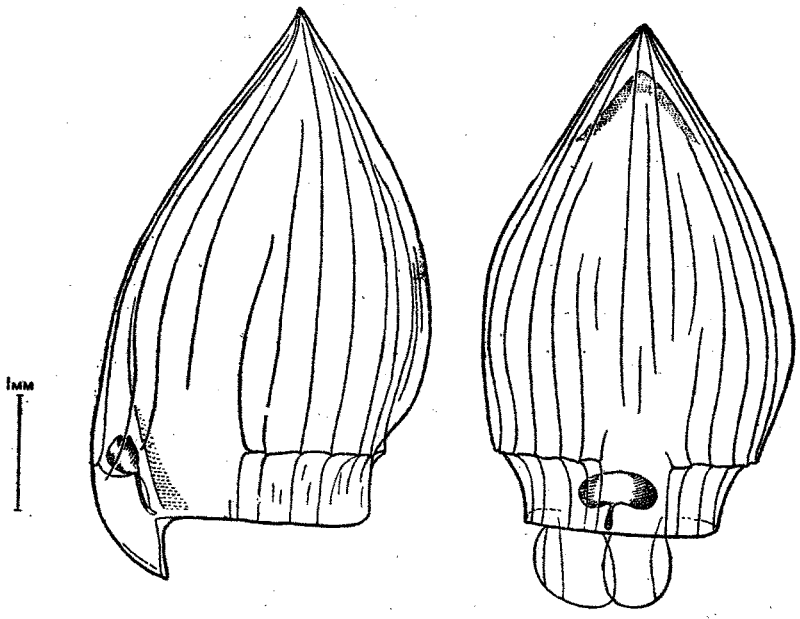
Syn.: *Lensia multicristata* (Moser) forme *grimaldii* Leloup, 1934 (part), non *L. grimaldii* Leloup, 1933.

L. lelouveteau is a small multistriate species. The ridges of the anterior nectophore are in five groups, three or more dorsal, seven or eight lateral and four to six ventro-lateral. Velar ridge present. The somatocyst is squat and kidney-shaped. Ventro-basal margins of bell well rounded.

The seven specimens on which I base the species *L. lelouveteau* are :—

'Discovery' Station 100, net TYF, fished open from 475 metres to the surface, 1 anterior nectophore. the

Fig. 23.



Lensia lelouveteau, sp. n. 'Meteor' Stn. 246, 1000–800 m.

holotype (7·8 mm.). Station 282, 300 m. to surface (open), 1 ant. nect.

'Meteor' Stn. 208, 100–50 m., 1 ant. nect. (3·1 mm.). Stn. 246, 1000–220 m., 1 ant. nect. (5·2 mm.). Stn. 277, 600–400 m., 3 ant. nect., one figured by Leloup, 1934 (5·7 mm.).

There has arisen some confusion connected with the name *grimaldii*. *L. grimaldii* is a good species which

I have redescribed below. The 'Meteor' material labelled *L. multicristata* forme *grimaldii* is contained in fourteen small tubes labelled by Leloup. I studied

Fig. 24.

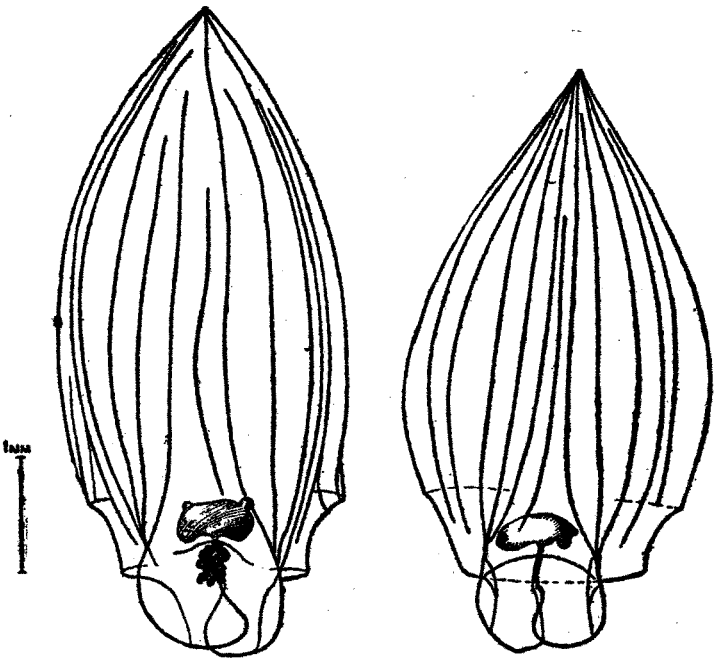


Fig. 25.

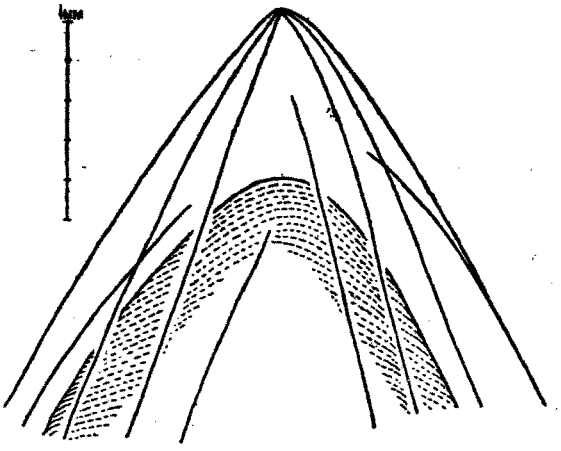


Fig. 24.—*Lensia lelouveteau*, sp. n. Left, 'Meteor' Stn. 277. Right, 'Meteor' Stn. 246, 1000–800 m. Ventral views.
Fig. 25.—*Lensia lelouveteau*, sp. n. 'Meteor' Stn. 246, 1000–800 m. Lateral view of apical part of nectophore.

these on Jan. 9, 1940. Four contained specimens that had dried up at some time and are no longer identifiable. None of the others contained specimens of either *L. grimaldii* Leloup, 1933, or *L. multicristata* Moser, 1925. Two

contained specimens of *L. ajax*, one a specimen of *L. exeter*, one a specimen of *L. hostile*, two specimens of *L. lelouveteau*; and another, which at one time contained the three specimens of the species that I have described as *L. lelouveteau*, figured by Leloup, 1934 (fig. 3), contained only the label. Dr. Leloup kindly sent the specimens themselves to me, and I examined them on January 22, 1940. The three remaining tubes contained specimens of what is perhaps a still further new species, a small *Lensia*, multistriate and without a velar ridge. Lack of material prevents precise description of it.

11. *Lensia grimaldii* Leloup, 1933. (Figs. 26–29.)

I was familiar with good specimens of this species under the manuscript name *duplex* some years before Leloup published a description and figures of one very poor, much lacerated and collapsed specimen with fragmentary nectosac. Through the courtesy of Dr. Leloup I was able to examine his holotype on Dec. 23, 1933. Although his figures are necessarily not very representative, I am satisfied that his name *grimaldii* must now be applied to the species figured below. Unlike *exeter*, the number and condition of the ridges is pretty constant. The species would appear to be a mid-water form.

With Leloup's later suggestion (Bull. Mus. Roy. d'Hist. Nat. Belg. x. 6, p. 38) that *grimaldii* does not represent a good species, but is only a variety of *Lensia multicristata* (Moser), I disagree. The one species is quite distinct from the other; and amongst the many specimens I have examined no intermediates have been found. Neither species has any connection with yet another described and figured by Leloup (*loc. cit.*, pp. 37–40) as *Lensia multicristata* forme *grimaldii*, taken at 'Meteor' Station 277. The combination of characters, small size, number of longitudinal ridges, presence of horizontal (velar) ridge, shape of baso-ventral angle and size and shape of somatocyst mark these last-mentioned specimens out as belonging to a distinct species, described by me under the new name *lelouveteau*, and represented by specimens taken by 'Discovery II.'

It is convenient to describe anterior nectophores like those of *L. grimaldii* in terms not of ridges and facets

but of infoldings between outward ridges. These outward ridges bear one or more longitudinal crests. When the muscular nectosac contracts in swimming, the semi-rigid chitinous investment has to fold inwards like the cover between the ribs of an umbrella, and then have enough elasticity to expand the nectosac again. Here we have

Fig. 26.

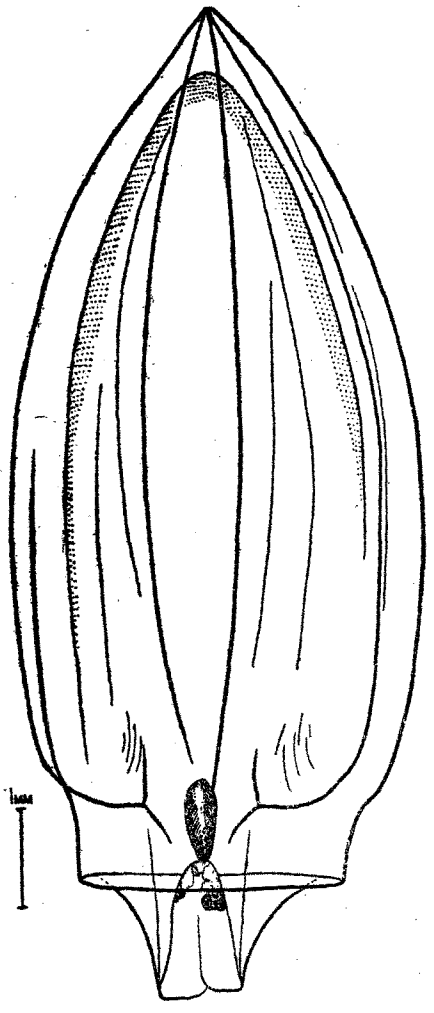


Fig. 27.

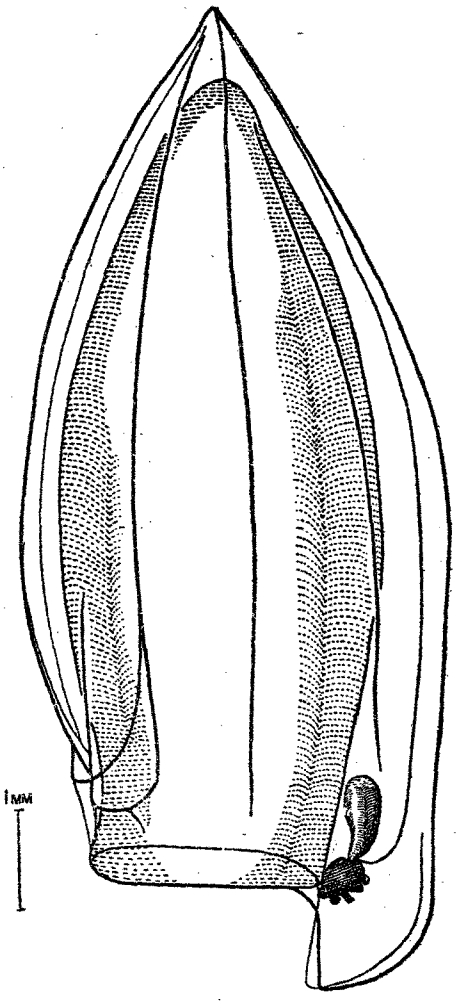


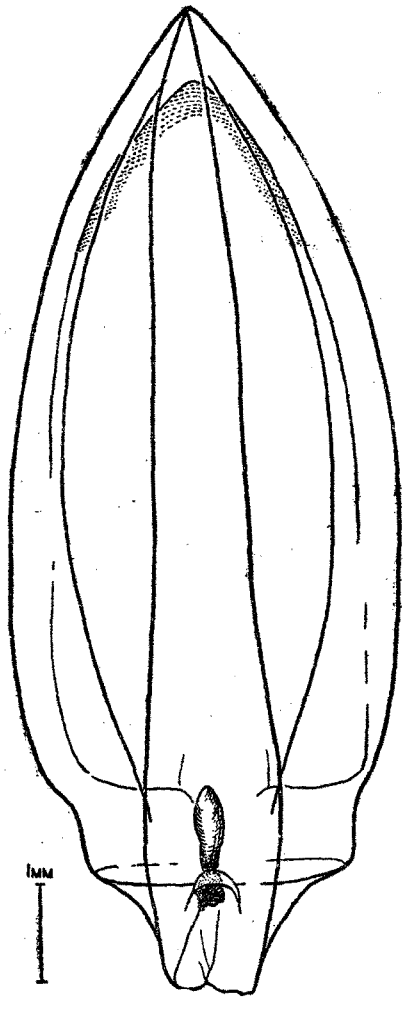
Fig. 26.—*Lensia grimaldii* Leloup. ' Discovery ' Stn. 282, 300–0 m. Dorsal view.
Fig. 27.—*Lensia grimaldii* Leloup. ' Discovery ' Stn. 282, 300–0 m.

a mechanism the habitual functioning of which lends itself to evolutionary change.

There is a pair of dorsal crests on a dorsal ridge that is flanked by two longitudinal infoldings, 'B and B' of Leloup's fig. 6. It can be seen that on contraction the folds converge orally and cut off the ridge and crests.

The two lateral ridges, each bearing two crests, are flanked by the antero-lateral and postero-lateral infoldings ('B B' and 'D D' of Leloup's fig. 6), while the rigid ventral area is separated from the lateral ridges by the same postero-lateral infoldings marked 'D and D' in Leloup's fig. 6. All the infoldings are longitudinal.

Fig. 28.



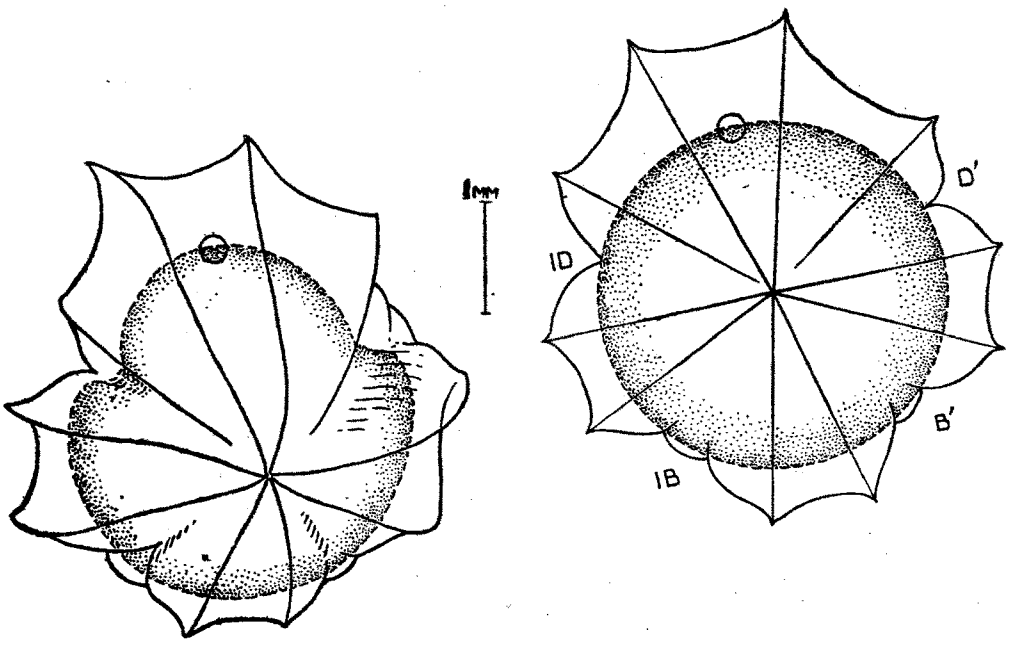
Lensia grimaldi Leloup. 'Discovery' Stn. 282, 300–0 m. Ventral view.

Viewed from the apex the dorso-ventral axis of the nectophore is longer than the latero-lateral axis, and not as shown by Leloup's figs. 6–9.

Sometimes the right, sometimes the left dorsal ridge is the longer. Occasionally a third incomplete ridge is

present, extending half-way up to the apex. As a constant character the ventral pair of ridges does not reach the apex.

Fig. 29.



Lensia grimaldii Leloup. ' Discovery ' Stn. 282, 300–0 m. Left, apical view. Right, diagrammatic apical view.

Localities.—' Carnegie ' Station : Cruise VII. St. 64. S. 397 : B. 7081. 1 specimen.

' Discovery ' Stations :—

Station.	Net.	Date.	Depth in m.	Specimens.
89.....	TYF	28. vi. 26	1000 (–0)	1
100 C	TYF	2. x. 26	450–550	1
100 C	TYF	4. x. 26	2500–2000	2
282.....	TYF	12. viii. 27	300–0	10
690.....	TYFV	7. v. 31	1500–0	2
699.....	TYFV	14. v. 31	500–250	1