measuring approximately 39 cm. in length, was captured in a large surface tow-net by the R.I M.S.S. "Investigator." The net had been shot at 6-30 p.m., shortly after the ship had been anchored for the night at a spot about 4 miles west of the entrance to Hinzé Basin on the south Burma coast (97° 45½′ E., 14° 43½′ N.) in about 10 fathoms, and had been allowed to drift with the tide, being kept on the surface by means of a bamboo float.

How an animal, so obviously a bottom-dweller, had been carried or made its own way to the surface, must, I fear, remain a mystery.

R. B. SEYMOUR SEWELL.

BRACHIOPODA.

NOTE ON THE DEVELOPMENT OF THE LARVA OF *Lingula*.—Up to the present time, of the various contributions to our knowledge of the development of the *Lingula* larva that have been published, only two can be considered in any way to approach completeness, to wit, those of Brooks[1] and Yatsu.[2] The accounts given by these two observers in the main agree very closely though differing in slight details, of which one of the most important is the length of the peduncle that is formed before protrusion from the shell takes place: according to Brooks the peduncle attains considerable length before it is protruded from the shell, whereas according to Yatsu only a short peduncle is formed. This difference may have been due either to the fact that Yatsu's specimens were kept in captivity during the latter part of their development or to a specific difference in the larvae obtained, those of Brooks's being the larvae of *Glotidia pyramidata*, whereas Yatsu's examples were those of *Lingula anatina*.

During the months of December and February, 1911, several of these larvae were captured in the surface tow-net off the mouth of Hinzé Basin and the neighbouring waters of the south Burma coast about four miles from shore and as they differ in one or two particulars from the previous accounts it has been thought that a brief account of these discrepancies may be of some little value.

The chief differences noted are two in number:--

1. *The stage of formation and protrusion of the peduncle.*—Both Yatsu and Brooks agree in stating that the peduncle first makes its appearance at the end of the 6-, or commencement of the 7-pairs of cirri stage, and the former observer found that in his specimens, in captivity, protrusion took place at the commencement of the 10 p.c. stage. The youngest specimens obtained by me in December had already reached the 9 p.c. stage

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[1] W. K. Brooks, "The development of *Lingula* and the systematic position of the Brachiopoda," *Chesapeake Zool. Lab.* Scientific Results of the Session of 1878, p. 35. Baltimore, 1879.

[2] N. Yatsu, "On the development of *Lingula anatina*," *Journal of the College of Science*, Tokyo, vol. xvii, art. 4.

and in these the peduncle had only just begun to develop, while in the oldest specimen, which had reached the 11 p.c. stage, no sign of protrusion was seen. In February only a single specimen was obtained but this one was remarkable in that it had already reached the commencement of the 14 p.c. stage and the peduncle was still only a small rudiment. In this connection it is interesting to note that as regards the length of peduncle formed, the present specimens agree closely with the description given by Brooks of the larvae obtained by him in America and contrast markedly with Yatsu's specimens from Japan.

Although, so far as I know, no specimens of Brachiopoda have been obtained in the region of Hinzé Basin, several examples of *Lingula anatina* have been found at other parts of the Burma coast and it would seem probable that my larvae are those of this species.

If this be the case, there can, I think, be no doubt that the short peduncle in Yatsu's specimens is a result of confinement in unnatural surroundings and is not a natural condition.

2. *The stage at which the change of shape of the shell takes place.*—Both the above-mentioned accounts agree in stating that the change of shape of the shell from transversely oval to longitudinally oval takes place at the 6-7 p.c. stage, and Yatsu gives the following measurements of his specimens in support of this statement:—

	Length.	*Breadth.*
5 p.c. stage	313 μ	386 μ
6 p.c. stage	411 μ	444 μ
7-8 p.c. stage	663 μ	615 μ

In the table below I have given the measurements of my specimens:—

	Month in which obtained.	Length.	Breadth.	Ratio of hinge to length.	Stage of development.
1	December ..	625μ	683μ	1 : 1·97	9 p.c. stage.
2	,, ..	629μ	666μ	1 : 1·99	,, ,, ,,
3	,, ..	683μ	633μ	1 : 2·41	,, ,, ,,
4	,, ..	750μ	725μ	1 : 2·90	Commencing 10 p.c. stage.
5	,, ..	850μ	789μ	1 : 3·00	10 p.c. stage.
6	,, ..	875μ	808μ	1 : 2·92	,, ,, ,,
7	,,	858μ	808μ	1 : 3·03	Commencing 11 p.c. stage.
8	,, ..	892μ	775μ	1 : 2·97	,, ,, ,, ,,
9	,, ..	900μ	833μ	1 : 2·99	11 p.c. stage.
10	,, ..	908μ	800μ	1 : 2·87	,, ,, ,,
11	,, ..	916μ	808μ	1 : 3·14	,, ,, ,,
12	February ..	1114μ	1114μ	1 : 3·25	Commencing 14 p.c. stage.

From the above it would appear that this change of shape takes place in larvae, obtained during December at about the 9 p.c. stage but in the 14 p.c. stage in those existing during the month of February.

Another point that seems worthy of note is the season at which these larvae were obtained. Both Brooks and Yatsu obtained their specimens during the month of August and, according to the latter observer, in Japan the breeding season extends from July to the end of August, and at no other period of the year are larvae to be found. The occurrence of larvae during the winter months in the plankton off the Burma coast may be due to either a local peculiarity or possibly to the existence of two breeding seasons during the year, one in the summer months July and August, and a second from December to February, but in either case I attribute the delay in the formation and protrusion of the peduncle and the change in shape of the shell to the less favourable time of year at which the development was taking place.

R. B. SEYMOUR SEWELL.

REPTILES.

Notes on the distribution of some Indian and Burmese Lizards :—

1. DISTRIBUTION OF *Liolepis* IN THE INDIAN EMPIRE.—The large and conspicuous lizard *Liolepis belliana*, Gray, is a characteristic feature of sandy tracts in Tenasserim and has been stated to occur in South Canara. Careful inquiries have convinced me, however, that it does not occur anywhere west of the Bay of Bengal It is very unfortunate that many of the older records of the occurrence of both reptiles and other animals in the Madras Presidency are equally unreliable. This is owing to two causes :—(i) A considerable number of Burmese specimens have, in at least one instance, been mixed with collections from S. India and all have been attributed to the latter. This has been pointed out by Major-F. Wall as regards certain snakes, and it is undoubtedly the case also as regards *Liolepis belliana*. It is a particularly unfortunate occurrence, because there is an actual affinity between the faunas of the mountains of S. India and the countries east of the Bay of Bengal which such mistakes tend to obscure. (ii) In a large number of cases specimens have found their way into public collections labelled *not* with the name of the locality in which they were originally found but with that of the locality of the institution from which they were sent to specialists or museums in Europe. Certain missionary colleges are largely responsible for such mistakes, and old records of such localities as Trichinopoly are worth less, unless they have been recently corroborated.

2. THE DISTRIBUTION OF *Mabuia bibronii* (GRAY).—This very distinct little skink is stated, vaguely, in the "Fauna" to occur in the "Carnatic," but the real interest in its distribution