

Localities:

- 64°45' N. 27°20' W. "Ingolf" St. 89, 584 m, 8°.4 C. 1 spec.
 49°23' N. 9°35' W. "Thor" St. 74, 9/6-06, 1200 m. 1 -
 61°15' N. 9°35' W. "Thor" St. 99, 22/5-04, 900 m. 4 -
 62°57' N. 19°58' W. "Thor" St. 166, 14/7-03, 957 m. 4 -
 Besides these, several specimens from Bergen and Lofoten are examined.

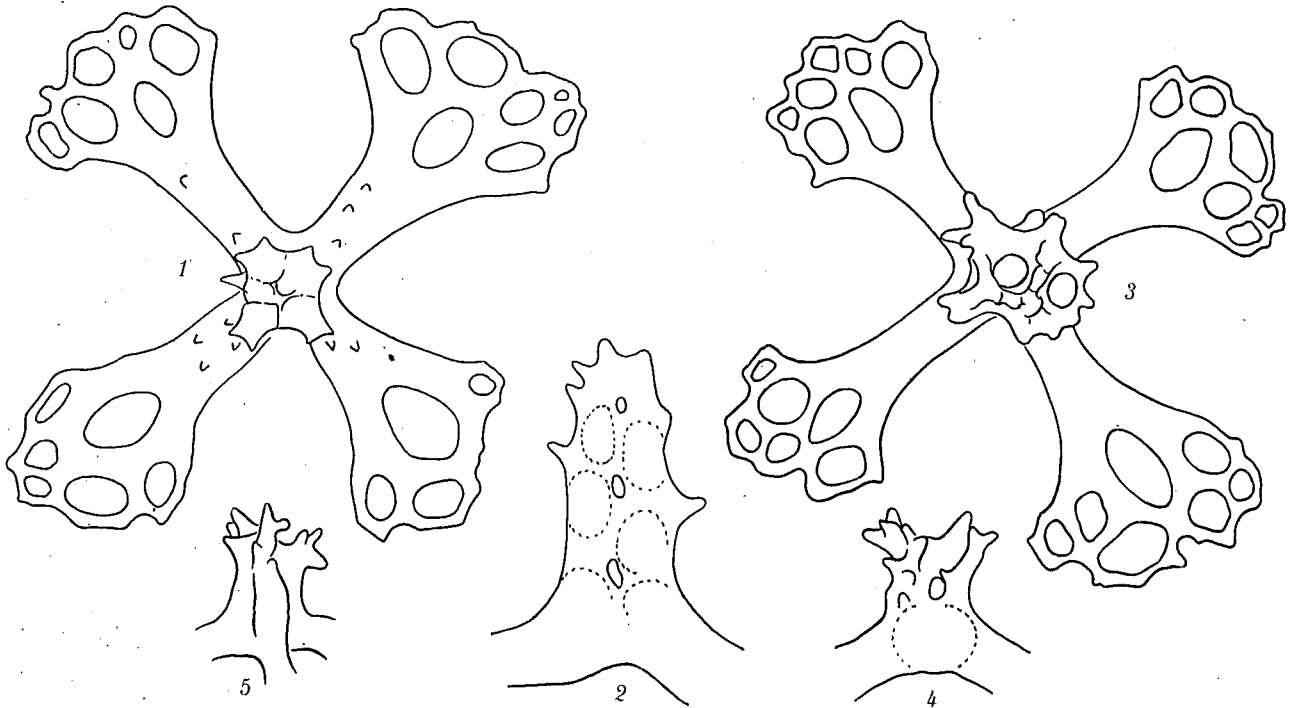
The specimens before me are all fairly large, measuring 10-15 cm in length, but only the specimens from Bergen are satisfactorily preserved.

The others have the exterior layer of the body wall more or

Diagnosis: Synallactide Holothurians with paired gonads and strongly reduced, even lacking, calcareous ring. Tentacles 18. Calcareous deposits resembling those of *B. natans* but usually having the spires supplied with six or more columns instead of the four usual in the genus.

Type specimen: The large specimen from "Ingolf" St. 73, in the Zoological Museum of Copenhagen.

Description: The type specimen measures 10 cm in length, 3 cm in width and 2 cm in height. The mouth is ventral and the anus is dorsal. It is pale greyish yellow, and has dorsally, besides two rows of large ambulacral papillae, some few smaller papillae irregularly scattered. Along the sides there are two rows of lateral



Textfig. 12. Socalled "large tables" from the posterior end of the dorsal side. $\times 300$. 1 and 2, *Bathyplores natans*. 3-5, *Bathyplores heterostylides*.

less worn off. There are, however, in most of the specimens sufficient portions of skin left for a safe identification.

As stated above the examination of these specimens has thrown light on the variation of the shape of the calcareous deposits. It is true that the shape of the deposits is fairly constant from one specimen to another, but within the individual it varies quite perplexingly corresponding to the different parts of the body surface. As nobody has previously taken this into consideration when classifying specimens of *Bathyplores*, a few typical figures of deposits from 1) the "shoulder", 2) the dorso-posterior area, 3) the midventral area, 4) the large dorsal papillae (textfig. 11), are given.

The examination of the anatomy of the specimens shows 20 tentacles, a faint but well developed calcareous ring, a single polian vesicle, and two tufts of dichotomously branched gonads. The stone canal is large and the madreporite is quite or often only partly buried in the body wall. The respiratory trees are well developed with a single base and small lobes on one side.

An outer genital papilla is totally lacking.

The distribution of *Bathyplores natans* has been given on p. 11 in textfig. 10.

Bathyplores heterostylides n. sp.

Localities:

- 62°58' N. 23°28' W. "Ingolf" St. 73, 915 m, 5°.5 C. 2 spec.
 59°28' N. 8°01' W. "Michael Sars" St. 76, 12/8-02, 1300 m 6 -

papillae, not the single distinct row of large papillae along the margin of the ventral side, which is so characteristic of *B. natans* and several of the other species of *Bathyplores*.

Ventrally there are two rows of tube-feet along each side, but midventrally there are no tube-feet at all. Over the mouth there are some irregularly arranged papillae.

There are 18 tentacles in both the type and cotype, and the calcareous ring is much reduced and only visible in a transverse section. There are no tentacle ampullae, but one large polian vesicle and one stone canal with a free madreporite, which is not—as in *B. natans*—buried in the body wall. The gonads are paired, and consist of numerous dichotomously branched tubes. At the base of these tubes, which include small but nearly ripe eggs, there are some small rudimentary thread-like tubes. The gonoduct opens into the dorsal interambulacrum with a rather large longitudinal slit, and is without any trace of genital papilla.

The respiratory organs are small and supplied with a common stem. They are simple tube-shaped organs with some low lobes on one side. The left one also has a small branch close to the base.

The longitudinal muscles are undivided.

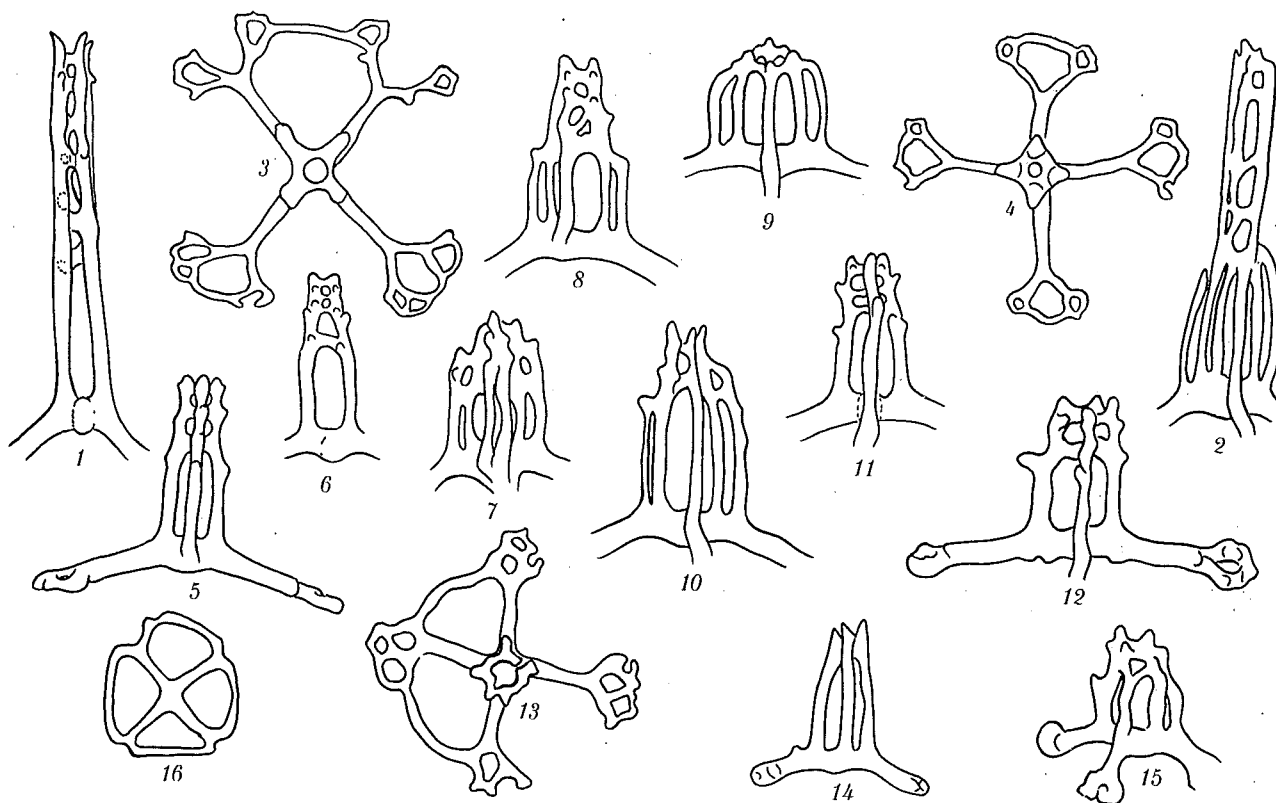
The calcareous deposits of the "shoulder" (textfig. 13 3-12) usually consist of four-armed tables with one to three pores in each arm. Now and then two of the arms are united by a rod. The spires consist in the simplest case of four columns, but normally there are six, and then the shape of the spire is somewhat irregular. Ventrally the deposits of the middle part, i. e. along the unpaired ambulacrum, which normally forms a longitudinal furrow, have

the plates smaller, with the arms fairly often united to circular plates with four large holes and four to twelve small ones.

In the posterior part of the dorsal side of the body, the tables are more than twice as large as in the anterior part. They are normally four-armed with seven holes in the ends of each arm, but often the arms are united to a large polypore plate. The spires (textfig. 12) are low and irregularly shaped, thus differing clearly from the corresponding spires in *B. natans* (textfig. 12 1-2).

In the dorsal papillae there are some very high tables (textfig. 13 1-2). The base of these is either four short arms, each with a single perforation in the ends, or ringshaped plates.

B. hexastylides differs definitely from all other species of *Bathyplores* in having more than four pillars in the spires. At first I supposed that these specimens were only abnormal specimens of *B. natans*, since normal four-pillared tables may also be found, but the presence of the characteristic tables appears to be typical. The specific difference from *B. natans* is also confirmed by the presence of only 18 tentacles and by the different shape of the large posterior tables as well as that of the general appearance of the body. There is no doubt that we have here a valid and independent form of *Bathyplores*.



Textfig. 13. *Bathyplores heterostylides*, calcareous deposits. $\times 300$. 1 and 2, from a papilla. 3-12, from the shoulder. 13-16, from the midline of the ventral side.