17. Notes on Pictothyris hanzawai lenticularis
Hayasaka and a New Species of the Same Genus.

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In a recent article entitled “On the Fossil Pictothyris from Taiwan and Tokuno-sima” published in Tigaku Kizi, Vol. 12, No. 2, pp. 39-46, 1 pl., December, 1941, I. Hayasaka made some biometrical studies on the well-known Pictothyris hanzawai Yabe, and discovered that one type or form of lenticular outline was rather different from the usual types of hanzawai. For this particular type, he proposed the name of lenticularis, and stated that it occurs both in Tokuno-sima and in the limestone forming the Syōkō-zan to the north of Takao in Taiwan.

The question arises as to whether the “shorter and more circular or lenticular specimens” which I. Hayasaka calls forma lenticularis can be considered to be adhesive with hanzawai or whether it can be included into some previously described species of Pictothyris, or whether it can be regarded as a distinct species.

In one of our previous articles (On Some Brachiopoda from Kagosima-ken, Kyūsyū, published in Jour. Geol. Soc. Japan, Vol. 48, No. 577, pp. 491-495, 1 pl., October, 1941), we dealt with the species of Pictothyris and then described two new forms from the material derived from the Pleistocene shell-beds of Yosida-mura in Kagosima-ken. Further, it was then stated that the beak characters of Pictothyris hanzawai Yabe differ remarkably from the other species in the genus and that it may be possible to establish a new generic name for it. Consequently, taking the strongly incurved beak which is very small for the large size of the shell, exceedingly small foramen and strongly calloused cardinalia, the new generic name Kikaithyris was proposed for Pictothyris hanzawai.

Judging from the figures of Pictothyris hanzawai forma lenticularis Hayasaka, the beak is not small, not strongly incurved and the foramen is evidently not of the Kikaithyris type. Under such considerations, it appears that forma lenticularis is not adhesive with hanzawai, but should be linked with some other species of Pictothyris, such as P. elegans Yabe & Hatai, a recent species from near the Oki Islands in the Japan Sea.

Pictothyris elegans Yabe & Hatai (Proc. Imp. Acad., Tokyo, Vol. 12, p. 44, figs. 1-4, 1936), is a shell closely resembling forma lenticularis in the charact-
ers of the beak, curvature of the hinge-line, size, shape and position of the foramen, and in the general contour of the posterior half of the ventral valve (the antero-lateral margin in forma lenticularis is broken and the anterior margin is incomplete, as can be seen from the figures of that form). The only difference, as can be judged from the illustrations of forma lenticularis, between that specimen and the type of elegans appears to lie only in the slightly more ovate outline of elegans. However, it should be kept in mind that the anterior margin and antero-lateral part of the shell is incomplete in forma lenticularis. Evidently, these two shells, the recent elegans and the fossil forma lenticularis belong to the same group, and are not of the hanzawai type. Therefore, since forma lenticularis is now removed from lineage with hanzawai, and brought into close relationship with, elegans, it appears that it could even be included into the limits of variation of elegans, even though that species is represented only by a single specimen. Here the writers are in the opinion that forma lenticularis is merely a variant of elegans and that it is not necessary to name all of the different types of outlines that may occur within a single species.

Hitherto, Pictothyris elegans was known from only a single specimen dredged by the S. S. Sōyō-maru from near the Oki Islands in the Japan Sea, and here it may be stated that its occurrence in approximately contemporaneous deposits of Tokuno-sima and Taiwan is of considerable interest, not only from the viewpoint of geographical distribution but also from the standpoint of geological occurrence.

Among the specimens of fossil and recent brachiopods which were at the disposal of the junior writer, an interesting specimen of Pictothyris was found. This specimen was collected by Prof. K. Baba from near Tomioka in Kyūsyū, and its description now follows.

PICTOTHYRIS RUBELLA, N. sp. (Figs. 1-2)

*Description:*—Shell of moderate size, measuring about 23mm in length, 18mm in width and 14mm in depth of contact valves, outline roundly ovate, test thick, finely punctate, punctations minute and squarely rounded in shape; valves nearly equally convex, although the dorsal is somewhat deeper; anterior and lateral commissures nearly straight, their margins not evenly rounded, the former being narrowly rounded; surface sculptured by concentric growth lines which are crowded on the lateral and anterior sides of shell, corrugated and foliate on latter side and there making shell appear incipiently truncate, periodically foliate and corrugate over surface; color dull-reddish,
paler in middle and posterior regions than in anterior parts of shell; hinge line narrowly and acutely arched, dorsal umbo rather swollen; ventral valve with no mesial depression or ridge in region of beak; beak moderately swollen, truncated by a rather large, subcircular foramen which is permesothyrid in position, beak-ridges defined; deltidial-plates conjunct, concave; interior features characteristic of the genus.

Remarks:—This species closely resembles and is hardly distinguishable from the well known Laqueus rubellus (Sowerby) in its external characteristics. However, the cardinalia serves easily to distinguish the present one from that species. Among the species of Pictothyris, probably *picta* (Dillwyn) may be close. However, in *picta* the shell is less thick, much less swollen, with narrower rounded front margin, with somewhat smaller foramen, less concavity of the deltidial-plates, and the posterior part of the shell is more thickly calloused.

Holotype:—Preserved in the Institute of Geology and Palaeontology. Tōhoku Imperial University, Sendai.

Type locality:—Near Tomioka, Kyūshū. Collected by Prof. K. Baba.

Geographical distribution:—Known only from the type locality.