日本古生物學會報告

(Transactions of the Palaeontological Society of Japan)

46. *Ogygitoides yabei*, a New Species of Trilobite from the Tsinan Limestone of Shantung, China

By

H. Y. MA

(Contribution from the Institute of Geology and Palaeontology, Tôhoku
Imperial University, Sendai, Japan. Received June 11th;
read June 19th, 1937)

The present article is based on specimens collected by Prof. H. YABE and Mr. K. OZAKI from the Tsinan limestone of Middle Ordovician age, west of Poshan (博山), Shantung, China. The Tsinan limestone is believed to be correlated with the Chikusan bed of South Korea and the Black River-limestone of North America.

At this place I should like to offer my warmest thanks to Prof. H. YABE and Mr. K. OZAKI for kindly presenting their specimens to my study, and specially to Prof. H. YABE for making possible the publication of this short note.

Genus *Ogygitoides* KOBAYASHI, 1934

1934 *Ogygitoides* KOBAYASHI, The Cambro-Ordovician Formations and Faunas of South Chosen. Jour. Fac. Sci. Imp. Univ. Tokyo, Sec. 2, Vol. 3, Pt. 8, pp. 483-484.

This genus was established by T. KOBAYASHI with the following remarks: "This genus is rather similar to *Pseudobasilicus* REED, but differs from *Basilicus lawrowi* SCHMIDT, the genotype of *Pseudobasilicus*, in the forwardly tapering glabella, middle eyes, and steep inclination of posterior limb of facial suture. The thoracic segments are not so falcated at the lateral extremities as in *Pseudobasilicus*. By these differences this new genus is easily

separated from *Pseudobasilicus*. These criteria also imply that *Asaphus nobilis* BARRANDE and *Asaphus ingens* BARRANDE may be more suitably grouped in *Pseudobasilicus* than in *Ogygitoides*."

KOBAYASHI also states that *Isoteloides* of RAYMOND is similar to *Ogygitoides* in general form, narrow axial lobe, obliteration of ribs and furrows, and in the presence of the marginal border on the cephalon and pygidium, but it is distinct in the feature of the glabella, which is marked merely with subparallel dorsal furrows without any clear division into anterior and posterior lobes as in *Ogygitoides*. The glabellar outline of *Isoteloides* approaches more to *Pseudogygites* than to the present genus. The generic characters are given below.

Diagnosis:—Entire shield smooth, elliptical, convex. Cephalon and pygidium large, nearly of equal length. Glabella subsphaerical, tapering forwardly, its furrows narrow, faint; occipital furrow shallow, distinct. Preglabellar area wide, concave border wide, defined, usually upturned. Fixed cheeks moderately wide. Compound eyes large, situated medially. Facial sutures isoteliform. Free cheeks rather large, long, with long genal spines.

Thorax with 8 segments, axial lobe slightly wider than pleural ones; apices of pleura rectangular.

Pygidium semi-ovate, axis sharply defined by dorsal furrows, tapering back rapidly; axial and pleural furrows faint, marginal border wide, usually depressed below pleural lobes.

Genotype:—*Ogygitoides raymondi* KOBAYASHI

Range:—Middle Ordovician

In the present collection of fossils from Shantung, China, is found a cast of the shield of a Trilobite with its cephalon faintly preserved, and the left pleural lobes of the thorax and pygidium crushed. This specimen evidently represents a new species, for which the following is proposed.

Ogygitoides yabei MA, n. sp.

Pl. 29 (14), Figs. 1-4.

Description:—Entire shield elliptical, quite convex. Cephalon and pygidium of nearly equal size, semi-ovate in outline. Glabella subspherical, moderately wide, hardly convex; dorsal and glabellar furrows shallow and faint. Occipital furrow weak. Preglabellar area narrow. Fixed

cheek with two large anterior and posterior limbs at each side. Facial sutures isoteliform (?). Eyes semi-circular, moderate in size, situated behind middle. Free cheeks broken.

Thorax of 8 segments, convex. Axial lobe wide; articulated half rings distinctly marked on fifth and sixth rings. Pleural apices rectangular, its grooves and furrows narrow, defined.

Pygidium subtriangular, strongly convex. Pygidial segments faint. Axis strongly tapering back, well marked by dorsal furrows. Pleural lobes steeply inclining to margin; marginal border wide. Surface smooth.

<i>Dimensions</i> :—Length of entire shield	ca. 13.2 cm.
Length of cephalon	47.0 mm
Length of thorax	35.0 "
Length of pygidium	50.0 "
Width of axial lobe	28.0 "
Width of pleural lobe	23.0 "
Width of marginal border	8.0 "

Comparison:—Compared to *Ogygitoides raymondi* KOBAYASHI, the present species has a wider and less convex glabella, weaker glabellar and dorsal furrows, fainter occipital furrow, narrower preglabellar area, wider axial lobe of thorax, with articulating half rings marked on the fifth and sixth rings, pleural lobes more strongly convex and more steeply inclined to margin, pleural grooves defined, and the pygidium is subtriangular in outline.

Formation and Locality:—Middle Ordovician, Tsinan limestone, east of the Yiauchiayü (姚家峪) fault, west of Poshan (博山), Shantung, China. Collected by H. YABE and K. OZAKI.

Holotype:—Preserved in the collection of the Institute of Geology and Palaeontology, Tôhoku Imperial University, Sendai, Japan. Reg. No. 61430.

山東「済南石灰岩」産三葉虫の1新種 *Ogygitoides yabei* (摘要)

馬 希 融

著者は矢部教授及び尾崎金右衛門理學士に依て山東省博山の西・姚家峪斷層の東より採集し來たれる 1 三葉虫化石を精査せし處、此標本は 南鮮中奥陶紀織雲山層産の *Ogygitoides* 屬に所屬するものにして、此屬の模式種 *O. raymondi* KOBAYASHI とは頭鞍及び中軸の外形と特性等の點に於て識別し得るを以て新種と認められ、茲に *Ogygitoides yabei* MA の新名を附したり。尙其の化石を含む 所謂済南石灰岩は 南鮮織雲山層並に北米 Black

River limestone に對比し得ることを論じたるものなり。

Explanation of Plate 29 (14)

Ogygitoides yabei MA, n. sp.

- Fig. 1. Weathered surface, dorsal view of cast. Nat. size.
Fig. 2. Restoration, dorsal view, showing the entire shield. $\times 3/4$.
Fig. 3. The same, right side view. $\times 3/4$.
Fig. 4. Profile of the test.
(aa'): Basal width of cephalon.
(bb'): Posterior width of thorax.

Middle Ordovician: In Tsinan limestone, east of Yiaochiayü Fault,
West of Poshan, Shantung, China.