

XLIII.—*Notices of new or rare British Animals observed during Cruises in 1845 and 1846.* By ROBERT M'ANDREW, Esq., and Professor EDWARD FORBES.

[Continued from p. 98.]

[With a Plate.]

II. *On the occurrence of a species of Pelagia in the British seas.*

ON the 23rd of August 1846, when cruising off Mount's Bay, Cornwall, our attention was attracted by some rather large Medusæ which passed the vessel at intervals. The weather was fine and the sea smooth; the Medusæ in question appeared like rose-coloured globes in the water. On capturing some we found they belonged to a species of the genus *Pelagia*, hitherto unnoticed in the British seas.

The following description was drawn up from the living animal (which is figured in Plate IX. fig. 5):—

*Disc*  $2\frac{1}{2}$  inches in diameter; subglobose, slightly depressed above, hyaline and tinged with pink, covered with small reddish orange warts which become obsolete towards the summit; margin with sixteen lobes, each bilobed: each lobule rounded and having a triangularly-lanceolate centre covered with reddish brown warts, which are also seen on the sides of the lobules, but are there not coloured. From beneath the separations of eight of the greater lobes spring as many tentacula; in the notches of the remaining eight are the ocelli. *Ocelli* composed each of an ovate red body (formed of pigment cells and prismatic crystals) suspended by a peduncle from a translucent (ganglionic?) mass, whence radiate fibres (nerves?), and behind which (connected by a nerve?) is a circular cavity containing an otolitic body in continual revolution.

*Tentacula* pink, simple, hollow, short when contracted and nearly equal throughout, but capable of extreme extension (even to the length of several feet); they consist of an external epidermic series of large pigment cells, forming a sheath or tube which is strengthened within by eight longitudinal ribs or columns of compact contractile granular tissue.

Beneath, the subumbrella presents four dependent arms united at their bases, but separated again so as to form a central cavity with four openings. In the central cavity we find four purple furbelowed reniform ovaries (containing irregularly lobed germs), separated by four masses of contractile tubes (spermathecal?) full of minute swarming bodies (spermatozoa?): the ovaries are fringed by similar tubes. From the gastric cavities run sixteen or more vessels to the margin, obscurely branching.

*Arms* lanceolate, furlbelowed and winged, separated from each other nearly to their bases. Their more solid and central parts are dotted with orange spots; their membranous margins are tinged with rose-colour: a canal perforates their united bases and opens into the central cavity.

This Medusa is highly phosphorescent; when irritated in the water by night it seemed like a globe of fire. The phosphorescence is of an intense light green, and proceeds from a mucus which comes away by handling. It is given out chiefly and most vividly by the warts of the skin—especially by the triangular masses of them on the marginal lobes. The ovaries are also phosphorescent, but require to be strongly irritated. If the under surface of the umbrella be irritated, the warts on the external skin opposite give out light, but not the under surface touched. A little crustacean is parasitic in the gastric cavity of this *Pelagia*. When removed from its dwelling it rushed through the water with rapid and frantic movements, seeking to return.

The species appears to be *Pelagia cyanella* of Peron and Lesueur; *Medusa pelagia* of Linnæus; *Dienæa cyanella* of Lamarck. The *Pelagia denticulata* of Peron and Lesueur and the *Pelagia parthenopensis* of Lesson are scarcely even varieties of the same. It is distinguished from *Pelagia panopyra* by the shortness of the peduncle formed by the united bases of the arms. This character appears however to be a variable one. It is a characteristic inhabitant of the Lusitanian region of the North Atlantic, and extends into the Mediterranean. On the British coasts it is probably confined to the entrance of the Channel.

The *Pelagia noctiluca* of Peron and Lesueur, founded on the *Medusa noctiluca* of Forskal, is scarcely distinct. Forskal, in his 'Fauna Arabica,' has the following pithy notes on its phosphorescence:—"Hæc, si quæ alia, vera est noctiluca. Multis experimentis in mari Mediterraneo, ubi habitat, præsertim sub insula Majorca institutis, mihi patuit, illam valde phosphoream esse; e margine lucem fortiorem emittet, quam e nucleo. [This is true; the warts which phosphoresce most strongly being very small and few on the centre of the disc.] Lacerata et in mare projecta, lucida via ad fundum descendebant fragmina. Partes discerptæ, aquæ marinæ in vasculo mixtæ et quassatæ copiose scintillant, et stagnando aquam cito corrumpunt. In cribello aquam superfudi; quæ dum transibat, partes istæ innumeris radiabant stellulis: et sæpe affusa aqua, lumen non minuebant. Id memorabile est, et magni canonis instar in hac experientia: aquam marinam per chartam bibulam percolatam lucendi vim perdere. Innumera Medusarum integrarum copia, ut corpora undis attrita vel rupta, succumque gelatinosum effundentia totidem certe phosphoros accendunt: hinc tamen theoriam universa-

lem alii deducant, ego non. Lente et modeste perpendant Medusæ ne virtutem hanc obtineant ex aqua, vel hæc a Medusis immensis scilicet Oceanus minimæ sui parti tanta miracula debet!"

XLIV.—*Characters of undescribed Chalcidites collected in North America by E. Doubleday, Esq., and now in the British Museum.* By FRANCIS WALKER, F.L.S.

1. *Pteromalus Lausus*, fem. *Niger, abdomen viridi cupreo et purpureo varium, antennæ piceæ, pedes flavo-fulvi, femora nigra, alæ sublimpidæ.*

Corpus breve, crassum, convexum, nigrum, obscurum, scitissime squameum, pilis albis hirtum: caput transversum, breve, thoracis latitudine; vertex latus; frons impressa, abrupte declivis: oculi picei, mediocres, non extantes: os piceum: antennæ piceæ, graciles, extrorsum crassiores, thorace paullo longiores; articulus 1<sup>us</sup> longus, linearis, fulvus; 2<sup>us</sup> fuscus, cyathiformis; 3<sup>us</sup> et 4<sup>us</sup> minimi; 5<sup>us</sup> et sequentes sat longi, usque ad 10<sup>um</sup> curtantes; clava fusiformis, apice ferruginea, articulo 10<sup>o</sup> paullo latior et multo longior: thorax ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine latius; parapsidum suturæ vix conspicuæ; scutellum brevi-obconicum: metathorax brevis, declivis: petiolus brevissimus: abdomen ovatum, nitens, læve, nigro-viride, basi cupreo et purpureo varium, supra planum, subtus profunde carinatum, apice acuminatum, thorace paullo longius vix angustius; segmentum 1<sup>um</sup> magnum; 2<sup>um</sup> et sequentia breviora, subæqualia: pedes nigri, simplices, subæquales; trochanteres picei; genua fulva; protarsi fulvi; mesotarsi et metatarsi flavi, apice fuscii: alæ sublimpidæ; squamulæ piceæ; nervi fuscii; nervus humeralis fulvus ulnari paullo longior, ulnaris valida radiali fere duplo longior, cubitalis radiali paullo brevior; stigma sat magnum, obscurius. (Corp. long. lin.  $1\frac{3}{4}$ ; alar. lin. 3.)

It is allied to *Pteromalus intermedius*, *Eutelus intermedius*, Ent. Mag. ii. 366.

2. *Pteromalus Cratylus*, fem. *Ater, abdomen nigro-æneum, antennæ piceæ, pedes flavi, femora nigra, alæ limpidæ.*

Corpus breve, latum, crassum, convexum, atrum, obscurum, scitissime squameum, parce hirtum: caput transversum, breve, thorace paullo latius; vertex latus; frons impressa, abrupte declivis: oculi picei, mediocres, non extantes: antennæ piceæ, subclavatæ, graciles, thorace paullo longiores; articulus 1<sup>us</sup> fulvus, longus, linearis; 2<sup>us</sup> cyathiformis; 3<sup>us</sup> et 4<sup>us</sup> minimi; 5<sup>us</sup> et sequentes mediocres, usque ad 10<sup>um</sup> curtantes et latescentes; clava conica, acuminata, articulo 10<sup>o</sup> duplo longior: thorax brevi-ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine latius; parapsidum suturæ vix conspicuæ; scutellum obconicum: metathorax brevis, declivis: petiolus brevissimus: abdomen nigro-æneum, brevi-ovatum, nitens,



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