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Mr. Gould then exhibited a new species of the genus *Podargus*, from Java, which he proposes to name *P. stellatus*.

PODARGUS STELLATUS.

Podarg. corporis plumis, alis, caudæque crebre guttulis, notisque irregulariter interruptis, his pallide brunneis, illis fuscis, ornatis, colli plumis lineâ angustâ nigra fasciatis ad apicem latis, et albescentibus lunulam facientibus; post oculos plumis pilosis elongatis orientibus, et posticè directis tectricibus alarum ad apicem marginis interioris notâ albescente, nigro posticè cinctâ, ornatis scapularibus inferioribus pallidioribus; pectoris plumis nonnullis flavescenti albo guttatis; rostro pedibusque pallide fuscis.

Long. tot. 8 unc.; rostri, $1\frac{1}{2}$; alæ, 4; tarsi, $\frac{1}{2}$.

Hab. Java.

Some observations on the *Physalia*, by George Bennett, Esq., F.L.S., Superintendant of the Australian Museum at Sydney, and Corresponding Member of the Zoological Society, were then read.

Some specimens of *Physalia pelagica* having been captured by Mr. Bennett while on his voyage to Sydney, he had an opportunity of observing the action of the numerous filamentary bodies attached to the air-bladder of this animal.

The longest of these appendages are used by the *Physalia* for the capture of its prey, and are capable of being coiled up within half an inch of the air bladder, and then darted out with astonishing rapidity to the distance of 12 or 18 feet, twining round and paralyzing by means of an acid secretion any small fish within that distance. The food thus seized by the *tentacula* is rapidly conveyed to the short appendages or tubes, which are furnished with mouths for its reception. These tubes appear to constitute the stomach of the animal, for upon a careful dissection nothing like a common receptacle for food could be observed, nor could Mr. Bennett detect any communications between them and the air-bladder, to the inferior portion of which they are attached by means of a dense muscular band. After an examination of an immense number of specimens, Mr. Bennett was unable to discover the orifice usually stated to exist at the pointed end of the bladder, nor could he ever succeed in expelling any portion of the contained air without a puncture being previously made. This organ consists of two coats, the outer of which is dense and muscular, readily separating from the inner, which resembles a cellular membrane.

The partial escape of air from the bladder did not at all affect the buoyancy, or appear in any way to incommode the *Physalia*; and even when it had completely collapsed, the animal still floated on the surface; upon removing the bladder entirely, the mass of *tentacula* sank to the bottom of the vessel, and though their vitality remained, all power of action was entirely destroyed.