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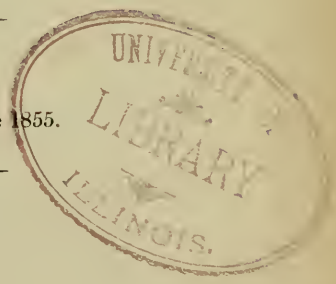

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communication accompanying the exhibition, that he had never before observed any similar variety of the species above named, nor could he find any account of its having been known to vary with a double flower. Sir J. E. Smith, however, in his 'English Flora,' states of *Anthemis nobilis*, that "varieties with double flowers are common in gardens;" and in Smith's own herbarium, in the Museum of the Society, are two specimens of *Pyrethrum inodorum*, var. *flore pleno*, the flowers of which very strongly resemble those exhibited. These were found in Norfolk by Mr. Crowe in 1799, and are mentioned in the 'English Flora' as "a double variety, having a multiplied radius and an obliterated contracted disk." In the present example Mr. Hogg states that "the external white petals, or rather the florets of the radius, are altogether larger and stronger; they are much elongated, strap-shaped, less narrow, with their margins somewhat folded inwards, and are rather more numerous than those in the ordinary single flower, from which they also differ by being sometimes bilabiate; whilst the disk itself is greatly contracted and reduced, and its tubular florets appear to have become very small and abortive; thus apparently indicating that the florets of the radius have become lengthened and enlarged at the expense of those of the disk." Mr. Hogg adds, that in general appearance these large double flowers of *Matr. Chamomilla* resemble the common white double flowers of the genus *Chrysanthemum*.

Read the commencement of a memoir "On the Anatomy and Physiology of *Physalia*, and on its place in the System of Animals." By William Huxley, Esq., Assistant-Surgeon of H.M.S. Rattlesnake. Communicated by the President.

December 5.

E. Forster, Esq., V.P., in the Chair.

Thomas Robert N. Morson, Esq., was elected a Fellow.

Mr. J. O. Westwood, F.L.S., exhibited a new species, of large size, of the genus *Achias*, Fabr., of which two species only were hitherto known.

Read the conclusion of Mr. Huxley's memoir on *Physalia*, commenced at the last Meeting.

The specimens of *Physalia* on which Mr. Huxley's observations were made, were collected on board the Rattlesnake, between the 25th of February and the 3rd of March, between lat. 25° and 37° S. and long. 5° and 7° W. They varied in size from $\frac{1}{6}$ in. to 2 in. in the long diameter of the float. The author first describes the general appearance of the specimens, of which he doubts whether the largest were adult, and then proceeds to a minute examination of their details, dividing them for this purpose into the float or air-bladder, and the appendages of greater or less length which depend from it when the animal is in its natural position at the surface of the water. The smaller specimens he states to be the best adapted for examination.

The float is described as consisting of an outer coat, an inner coat and an air-sac contained within them, attached only to one spot of their parietes, and there communicating with the exterior by a small constricted aperture, which was always found on the upper surface. The disposition of the appendages is very irregular, but the larger tentacles are generally placed more externally, the smaller and nascent organs more towards the centre. These appendages are of three kinds, and consist of stomachal sacs, tentacles and cyathiform bodies. Of each of these the author gives a detailed description in their more perfect form, as well as in their undeveloped state as nascent organs; and then proceeds to inquire, first, what is the physiological importance of the organs described, and secondly, what zoological place should be occupied by an animal provided with such organs so disposed.

Each of these questions the author treats at considerable length. Of the function of the stomachal sacs in receiving the prey there can be little question; but it may be doubted whether the digested nutritive matter circulates in the ciliated water-carrying canals or is absorbed into totally different channels. In the latter case the purpose of the stomachal villi would plainly seem to be to absorb nutritive matter and convey it through their central canal to the wide interspace existing between the outer and inner membrane; but the author states that he has never seen in this interspace any corpuscles analogous to those described by Will as blood-corpuscles. He suggests that the villosities noticed by Dr. Milne-Edwards in the stomachal sacs of *Apolemia* are the same organs, and not ovaries as Dr. Milne-Edwards considers them; and observes that similar organs exist in a *Diphya* (*Eudoxia*), hereafter to be more fully described. The function of the tentacles, both as prehensile and defensive organs, admits of little doubt; and on this subject the author notices an erroneous view of M. Lesson, who describes them merely as

ducts for conveying an (hypothetical) acrid fluid from an (hypothetical) poison-gland. He also controverts M. Lesson's opinion that certain of the colourless tentacles are to be regarded as branchiæ; being quite convinced that there is no difference between these and the ordinary tentacles except in the absence of colour. As regards the function of the cyathiform bodies, he has no other than analogical evidence to offer. The only organs in the *Acalephæ* with which he conceives them to have any resemblance are the natatorial organs of the *Physophoræ*. But their little adaptation to a similar purpose, and the entire absence even of their rudiments in young *Physaliæ*, discourage this comparison; while on the other hand they bear a singular resemblance to the female generative organs of a *Diphya*, and this resemblance extends even to the younger stages of both.

Mr. Huxley concludes by referring *Physalia* to the position assigned to it by Eschscholtz among *Physophoræ*, and near *Discolabe* or *Angela*. In fact, he regards *Physalia* as in all its essential elements nothing but a *Physophora*, whose terminal dilatation has increased at the expense of the rest of the stem, and hence carries all its organs at the base of this dilatation.

The paper was illustrated by pencil drawings of the structures described.

Read also a translation * from the Swedish, of "Almanac notes for the year 1735, by Charles von Linné."

* *Note by Dr. Wallich.*—The Council of the Society did me the honour at the end of last session to entrust the duty of translation to my care. It has been made in the first instance from a communication by Joh. Aug. Holmström, in "Botanical Notices" edited by Al. Ed. Lindblom, No. 12 for December 1845, pp. 210–218, with the following motto and preface. Mr. Bentham having pointed out to me that there existed a German translation by Dr. Beilschmid in the *Flora* for February 1847, pp. 97–104, I have gladly availed myself of this additional aid. Nor have I altogether neglected to consult the precious little relic itself, now in the Society's possession, although of course without any other result than that of verifying the fidelity of Mr. Holmström's edition. All the notes are his with very few exceptions, which have been duly marked. I have taken the liberty of frequently leaving Linnæus's abbreviations *in statu quo*, and very rarely indeed altered his orthography.

"Parva hæc quippe, et quanquam paucis percontantibus adorata, tamen ignorantibus transcursa."—*Apuleius*, Florida.

Every, even the smallest memorial of a truly and through all ages great man, possesses its value, and deserves to be secured from decay and oblivion. It is on that account that I have thought it my duty to publish these notes of the 'Princeps Botanicorum,' which have accidentally come into my hands. Although containing nothing