TRANSACTIONS

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M.DCCC.

II. *Descriptions of some Marine Animals found on the Coast of Wales.* By the late *John Adams, Esq. F. L. S.*

Read February 6, 1798.

PHALANGIUM.

1. *grossipes.* P. CORPORE minuto cylindrico, humeris tuberculato, pedibus longissimis. *Linn. Syst. Nat. Ed.* 13. *p.* 1027.

Milford Haven.

Obs. To the minute and accurate description given in the *Systema Naturæ* I can have nothing to add, except that its colour is a dirty red.

2. *hirsutum.* P. corpore subplano decemangulo.

TAB. II. *fig.* 1, 2.

Milford Haven. Tenbigh.

Obs. Body oval with ten angles, and marked with a transverse band near the centre; antennæ serrated on the interior side; feet eight, hairy; tail cylindrical, obtuse; colour palish brown; length $\frac{1}{3}$ inch.

ONISCUS.

1. *bidentatus.* O. abdomine nudo, caudâ obtuſiſſimâ, ſquamâ ultimâ bidentatâ.

TAB. II. *fig.* 3, 4.

Milford Haven.

Obſ. Length $\frac{1}{2}$ inch; upper ſide marked with ſix tranſverſe rows of ochreous ſpots; ſcales ſeven, the laſt with two teeth, which readily diſtinguiſhes this ſpecies.

NEREIS.

1. *viridis.* N. viridis filiformis ſegmentis CXXX. *Linn. Syſt. Nat. Ed.* 13. *p.* 1086.

Amongſt young plants of the *Fucus pinnatifidus* at Tenbigh.

Obſ. Length $2\frac{1}{4}$ inches.

ACTINIA.

1. *maculata.* A. coralliflora, tentaculis numeroſiſſimis retractilibus brevibus albis.

Milford Haven, ſurrounding the apertures of deſerted ſhells of the *Murex deſpectus.*

Obſ. This beautiful ſpecies is longitudinally ſulcated, having the edges of the baſe crenated: the lower part is an obſcure red, and the upper part is tranſparent white marked with fine purple ſpots; the outer circumference of the aperture has a narrow ſtripe of pink. When expanded, the ſuperior diviſion

ſion of the body ſeems formed of fleſhy bars placed in a reticulated manner, and lined with a fine membrane. From perforated warts, placed without order on the outer coat, iſſued white filamentoſe ſubſtances variouſly twiſted together: I have obſerved a ſimilar body ejected from the mouths of all the ſpecies of this genus, which have fallen within my notice.

2. *ſenilis.* A. ſubcylindrica tranſversè rugoſa. *Linn. Syſt. Nat. Ed.* 13. *p.* 1088. *Baſter. ſubſ. t.* 13. *f.* 2. bona.
Rocks, Tenbigh.

Obſ. The ſpecimens I obſerved were ſmaller than as repreſented in the figure above quoted; but that remarkable ſoft hairy appearance ariſing from the ſlender form and number of the tentacula, which ſo readily diſtinguiſh it from its Britiſh congeners, is well pourtrayed. Colour white or pink; when at reſt, the exterior coat is ſmooth.

ASTERIAS.

1. *minuta.* A. corpore rotundo, radiis quinque tenuiſſimis hirſutis. *Penn. Br. Zool. v.* 4. *p.* 63. n. 61.
Tenbigh, rare.

Obſ. Body round, convex, brown, ſomewhat larger than the head of a common pin; rays hirſute, about three times the diameter of the body, white. When examined under a microſcope, the upper ſide appears marked with a tawny yellow ſpot in the form of a

pentagon, and the under ſide with a ſmall yellow cinquefoil. The body contains a yellowiſh juice. Rays jointed, and from either ſide of each joint proceed three oval pellucid pointed bodies, which cauſe its hirſute appearance.

2. *rubens.* A. ſtellata, radiis lanceolatis gibbis, undique aculeata. *Linn. Syſt. Nat. Ed.* 13. *p.* 1099. *Baſter. ſubſ. t.* 12. *f.* 1—6.

Not unfrequent in Milford Haven.

Obſ. Colour pale orange; diameter 14 inches.

3. *pectinata?* A. radiata, radiis duplicatis; ſuperioribus pinnatis, inferioribus filiformibus. *Linn. Syſt. Nat. p.* 1101.

A. decacnemos. *Pen. Br. Zool. v.* 4. *p.* 66. *t.* 33. *f.* 71. bona.

In Milford Haven, very common.

Obſ. Both the pinnated and ſimple rays in this ſingular ſpecies are cloſely jointed throughout, and from theſe articulations ariſes its flexibility. The pinnæ on the under ſide are furniſhed with hollow tubes, gradually decreaſing in ſize as they approach the end; from which proceed, at the will of the animal, ſmall filiform, tranſparent, flexible bodies, which are probably the organs of feeling: On ſeparating one of the pinnæ from the main ſtem, the fleſh was found to be compoſed entirely of ſmall opaque globes. The filiform rays (or perhaps more properly the *radicles*, ſince by them the animal attaches itſelf to any thing) are each terminated by an incurvated claw, reſembling in figure and evidently for the ſame purpoſe as the claws of birds. The body

body is covered on the upper ſide by five unequal valves. It is remarkable of this ſpecies, that it is furniſhed with *two* apertures, one at the confluence of the valves, the other in the largeſt valve; their poſition with reſpect to the centre is variable: the laſt may readily eſcape obſervation, except when the animal chooſes to elevate it above the plane of the valve. When fully expanded, the inſide appears clothed with a fine membrane longitudinally folded and revolute at its margin. Colour deep red.

Since the illuſtrious Mr. Pennant has not referred his A. *decacnemos* to the A. *pectinata* Linn. (though he has quoted Barrelier and the figure of Linckius, which are given by Linnæus as ſynonyms to his A. *pectinata*), I cannot but feel apprehenſive of having committed an error in conſidering them as the ſame ſpecies, and have conſequently affixed a mark of doubt to the Linnean reference; but ſince the ſpecific character given in the *Syſtema Naturæ* accords perfectly with numberleſs ſpecimens which I have examined, I truſt it will not be the cauſe of any confuſion to a Britiſh naturaliſt.

SERTULARIA.

1. *imbricata.* S. ſubramoſa, veſiculis ſubclavatis, ſurſùm inordinatè imbricatis.

TAB. II. *fig.* 5—11.

On the *Fucus nodoſus.* Milford Haven.

Obſ. This ſpecies ſeems moſt nearly allied to the S. *cedrina.*

drina. Linn. Syſt. Nat. Ed. 13. *p.* 1313. n. 28. *Pallaſ. Zooph. p.* 139. from which however it differs in the veſicles not ſurrounding the ſtem in any regular ſeries, and in their ſhape. Height, from one to three inches. Young ſhoots cloſely imbricated to their baſe, but older ones often naked: the ſmaller branches, which proceed from a main ſtem, have the veſicles placed bifariouſly, but at their apex they reſume the imbricated form.

TUBULARIA.

1. *flabelliformis.* T. tubulis parallelis faſciculatis; faſciculis radiatim diſpoſitis.

TAB. II. *fig.* 12, 13, 14.

On the *Conferva rubra.* Milford Haven.

Obſ. This minute coralline differs conſiderably from its Britiſh congeners in habit, but agrees with them in texture. Its origin is a ſimple cylindrical ſtem, affixed at its baſe, which is a little dilated to the ſtems of the Conferva: it ſoon, however, loſes this form, and very abruptly becomes dilated into a fan-ſhaped compreſſed body, from which proceed eight rays. Theſe rays, when examined under the firſt magnifier of Ellis's microſcope, appear compoſed of equal and perfectly cylindrical tubes. In ſome I obſerved a deep crimſon ſpot, which was probably a dead or torpid polype.

EXPLA-

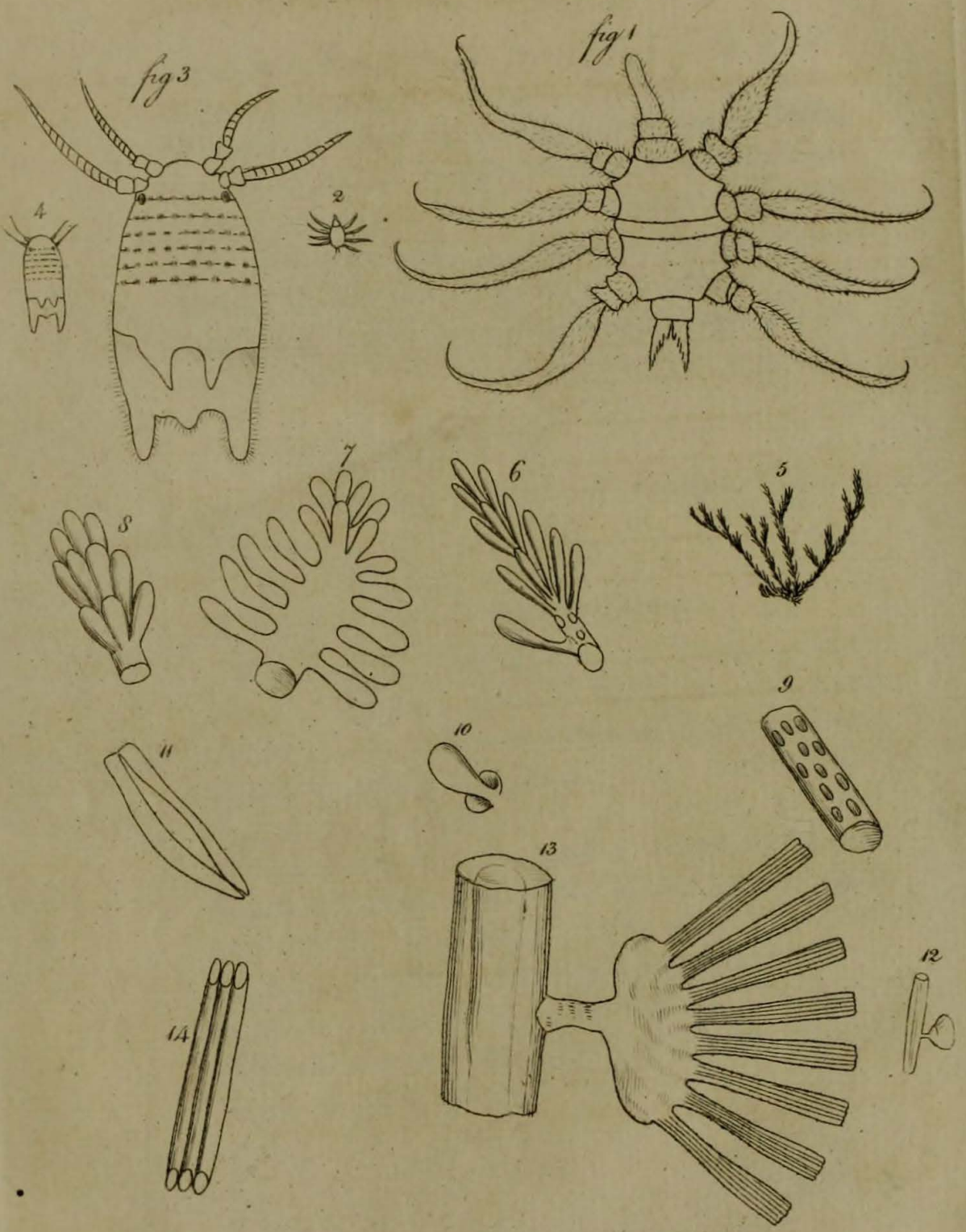
fig 1
fig 3
2
4
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EXPLANATION OF TAB. II.

Fig. 1. Phalangium hirſutum, magnified.
2. ———————, natural ſize.
3. Oniſcus bidentatus, magnified.
4. ———————, natural ſize.
5. Sertularia imbricata, natural ſize.
6. ———————, a branch, magnified.
7. ———————, a young branch, magnified.
8. ———————, a ſhoot from the baſe, magnified.
9. ———————, the ſtalk without the veſicles, magnified.
10. ———————, a young cell.
11. ———————, a polype in its cell.
12. Tubularia flabelliformis, natural ſize.
13. ———————, magnified.
14. ———————, tubes which compoſe the rays, magnified.

III. *Obſer-*