

More of its advantages might be mentioned, but these, we apprehend, may be enough to recommend it at present.

J. Bevis.
Ja. Short.

XLVI. *A Letter from Mr. John Ellis to Mr. Peter Collinson, F. R. S concerning a Cluster-Polype, found in the Sea near the Coast of Greenland.*

S I R,

Read Nov. 8, 1753. **T**HE marine production, that you were so obliging to send me, appears to be an animal, not a vegetable, as your friend call'd it, who sent it to you. Upon examining it, I find it to be a species of cluster-polype, consisting of many bodies united at one common base. This specimen appears to have three-and-twenty distinct ones. I have since seen another, that was taken at the same time, that had between thirty and forty.

Each body is furnished at the top with eight arms or *tentaculi*, which expand themselves in the form of a star. Each arm is again furnished on each side with a row of small fibres, which seem to do the office of fingers. In the centre of the eight arms appears the mouth, surrounded by six little semicircular lips standing upright.

Upon dissecting one of the bodies lengthwise, it appeared to consist of a strong muscle, contracted

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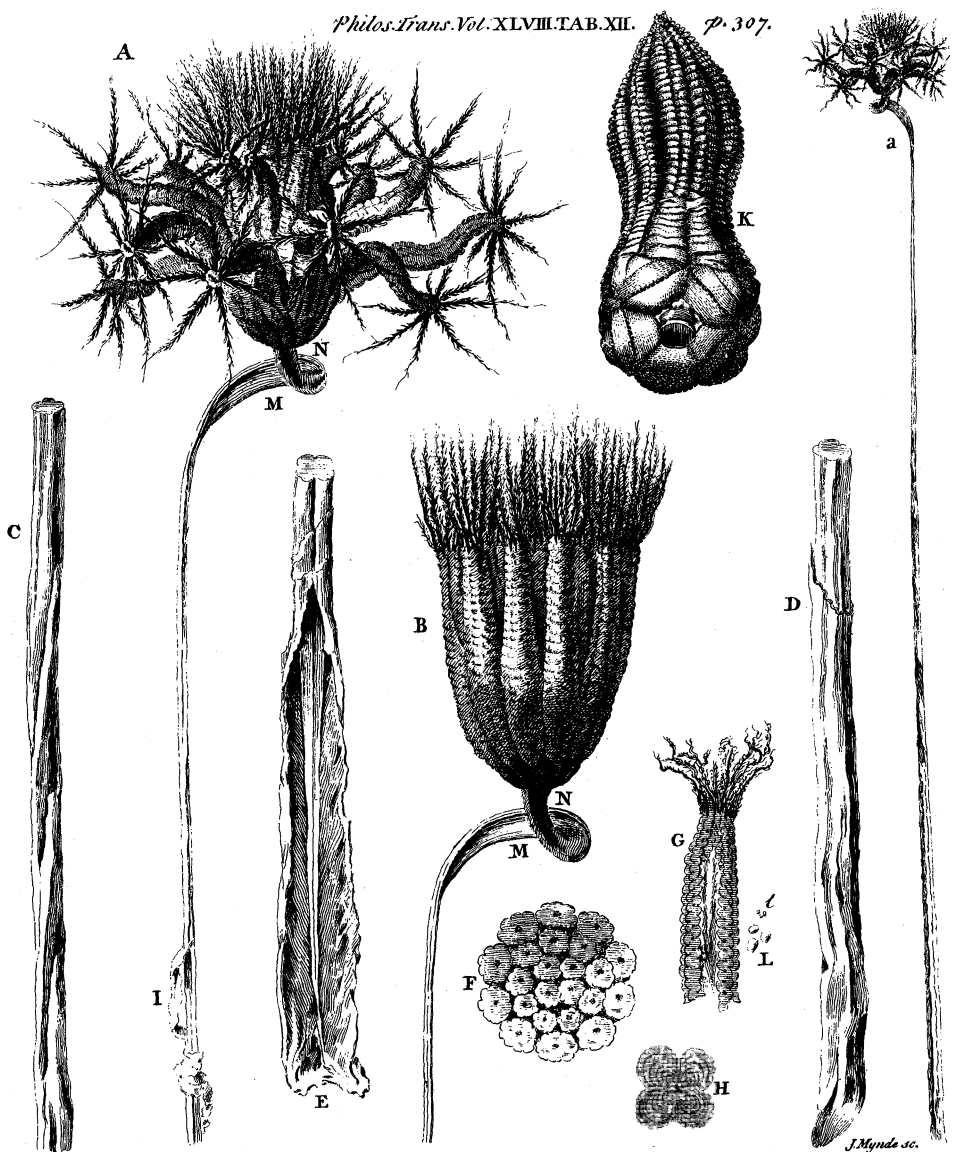
into little waves or wrinkles. In the little cavities of these I observed sundry small seed-like particles, perhaps the spawn of the animal: when magnified, they appeared of a spherical form, a little compressed.

To the centre of the base, where the cluster of polypes unite, and make one body, there grows a four-square bony stem of six feet long, having four grooves, one on each side. At the joining to the fleshy part, the bony stem is very small, and a little twisted, like the turn of a screw, extending a membrane like a bladder, for about two or three inches in length, and near an inch in breadth, from the fleshy part downwards. The membrane then begins to close insensibly, and becomes a cuticular covering to the bony stem, which now increases gradually, till it becomes a quarter of an inch square. Within five or six inches of the bottom of the stem the bony part begins to grow smaller, till it comes to a point; and the cuticular part becomes cartilaginous, and supplies this tapering part with a quantity of this elastic substance, equal to the deficiency of the bone.

The use of this membrane, or bladder-like, skin at the top of the stem, may possibly be intended to give the animal a power to raise and fall itself in the water at pleasure.

It appears from the twist in one part of the stem, that the stem, when very small, and not so bony, had met with some violence, that had turned it out of its direction; the mark of which has still grown on with it: for the stem of the other specimen, taken at the same time, was quite even.

Upon cutting it across, we discover the distinct *laminæ* to each angle, rising from a small point in the centre, and separated by a cross, that joins the opposite



opposite grooves. Upon putting a thin shaving of it into vinegar, a strong effervescence was immediately raised, which dissolved the gritty or coralline part, and discovered the fine membranes that inclosed it. These two substances seem to compose this bony, ivory, or coral-like stem.

The disposition of the polypes, with regard to one another, is represented by a cross section in the adjoining plate (*see* T A B. XII.) ; where you will observe, that 10 occupy the outward circle, 9 are in the next, and 4 are in the center.

I have learned lately from Mr. Duntze, the gentleman, who presented you with this great curiosity, the following account of it :

That it was taken in the latitude of 79 degrees north ; which is within 11 degrees of the pole, and 80 English miles from the coast of Greenland, by Captain Adriaanz, commander of the *Britannia*, while he was on the whale-fishery last summer. The captain founding one day in very deep water 236 fathom, two of them clung to his line. He says the arms or *tentaculi* of the polypes were of a bright yellow colour, and fully extended, when he brought them to the surface of the water ; and made a most agreeable figure, like a fine full-blown flower, which the captain took them for.

I must further observe, that the *Encrinos*, or *Lilium lapideum* of the curious in fossils, so little known before, is thought to be of this class. I am,

S I R,

London, Nov. 8.

1753.

Your most obedient humble servant,

John Ellis.

References

References to TAB. XII.

- A*, The cluster'd polype in its natural size, extending itself.
- B*, The same polype, as it was received, after it had been soak'd in water, and the *tentaculi* laid strait.
- a*, The polype in miniature, with its stem of bone or ivory.
- c*, Part of the ivory stem twisted.
- D*, The lower part of the stem, cover'd with a cartilage.
- E*, The cartilage open'd, to shew the tapering of the bony part.
- F*, The cross section, to shew the position of the several bodies of the polype.
- H*, The cross section of the bony stem magnified.
- G*, One of the bodies cut open, to shew its internal muscular form.
- l*, The eggs or spawn in the natural size.
- L*, The same magnified.
- I*, The cuticular covering, which is continued from the bladder at *M* to the cartilage at *E*, or from one end of the stem to the other.
- N*, The indented muscular base, where the bodies of the polype all unite.
- K*, A figure of the *Encrinus*, or *Lilium lapideum*, from *Rosinus*.