An account of a new zoophyte, or animal plant, from Groenland : in a letter to Albert Haller / Written in High German by Christlob Mylius ; Now translated into English.

Contributors

Mylius, Christlob, 1722-1754. Haller, Albrecht von, 1708-1777.

Publication/Creation

1754

Persistent URL

https://wellcomecollection.org/works/ehk7jw4y

License and attribution

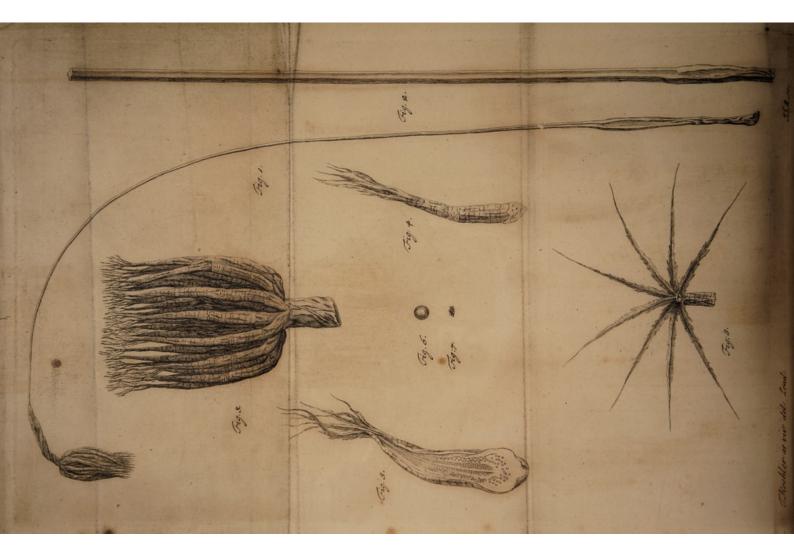
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

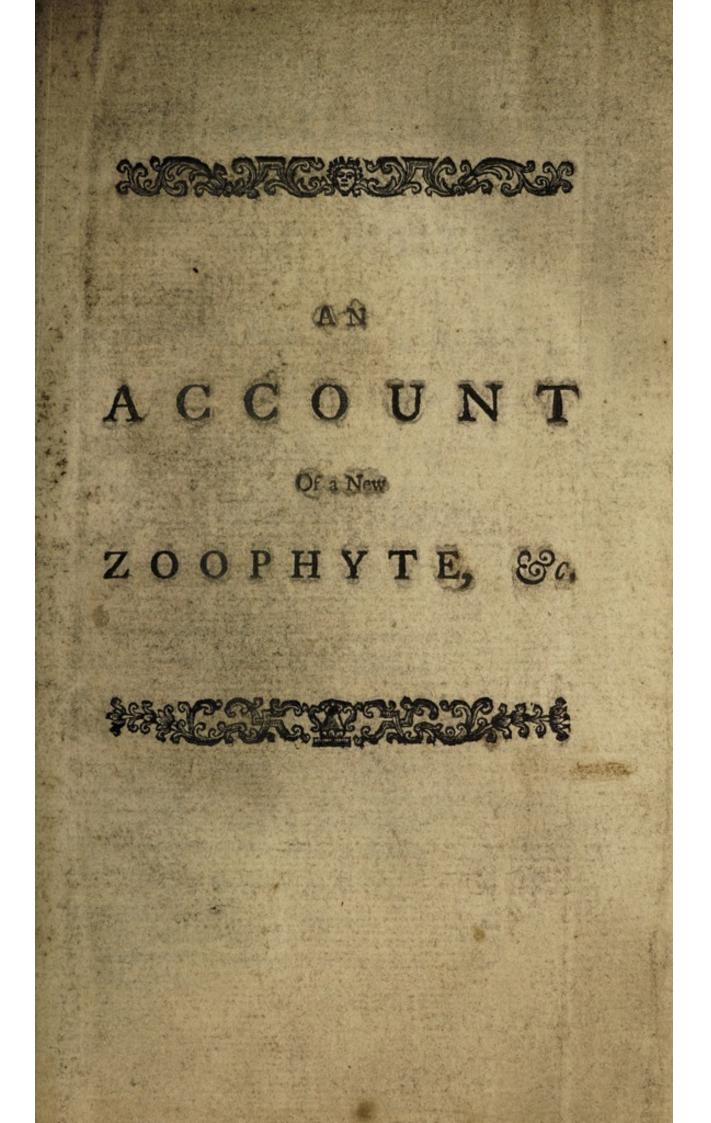
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

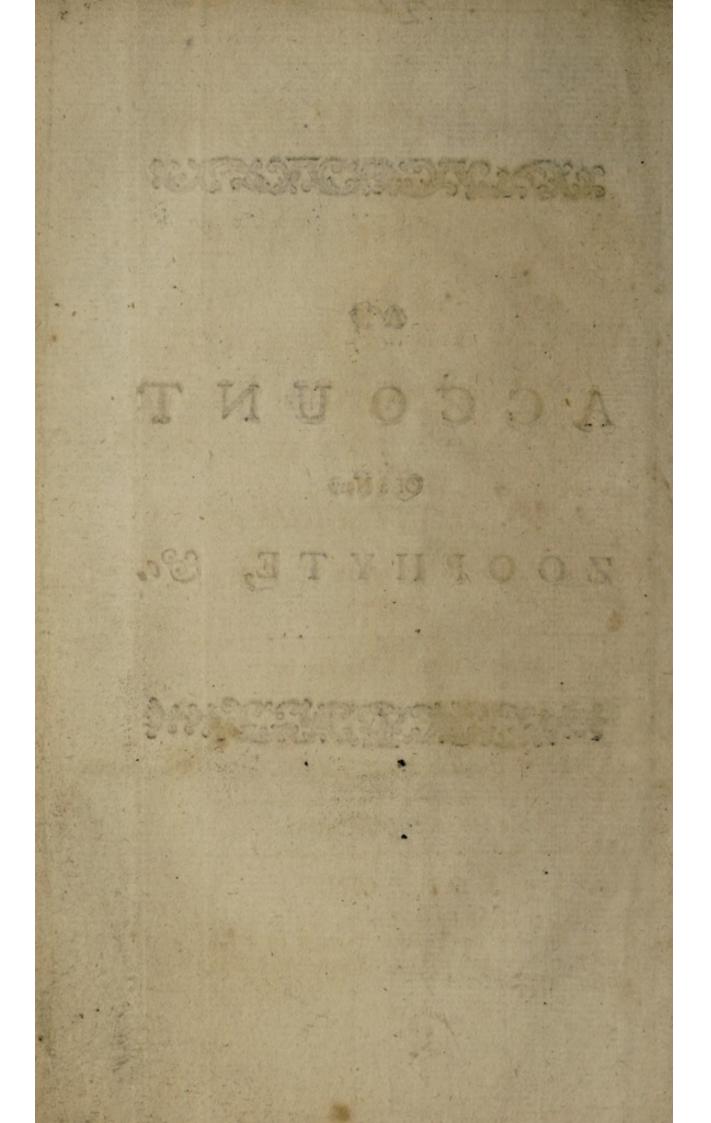


Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org









ACCOUNT

AN

Of a N E W

ZOOPHYTE, or

ANIMAL PLANT,

From GROENLAND.

In a L E T T E R to

Dr. Albert Haller,

Prefident of the Royal Society of Sciences at Gottingen.

Written in High German by

CHRISTLOB MYLIUS.

Now translated into English.

Prior tempore, prior jure.

LONDON,

Printed for, and Sold by A. LINDE, Bookfeller to her Royal Highnefs the Princefs Dowager of Wales, in Catharine-Street; and Sold by J. ROBINSON, in Ludgate-Street. 1754.

NA 2 NU Of a N E W HIO 2 E me ANIMAL PLANT, From GRORNLAND. In a L E T T E R to Dr. Albert Hallers " Prefident of the Royal Society of Sciences Gallingen. Written in High German by CHRISTLOB MYLIU Now translated into Engliss. Prior tempore, prior jure. HOUNDON, Printed for, and Sold by A. LINDE, Bookeller to her Royal Highnels the Princels Dowager of Waler, in Catherine-Sweet; and Sold by J. ROBINSON, in Ludgates Storet. 1754.



Occiffons, as one of A whole ficilital Abet-

tors of the fame, are than I obvas, SIR

ences tonding to publicic Advantage, and ca-

tertaining in themfolves, paysito you on all

ACCOUNT

Of a N E W

ZOOPHYTE.

SIR,



HE great Share You take in procuring a good Success to my American Travels, for which I

am actually preparing ; the Obli-

gations I owe in a particular Manner to a B learned

learned Society, whofe chief Manager you are; together with those Favours you bestowed on me, which I shall, at all Times, be ready gratefully to acknowledge; and that high Regard which every one, that effeems Sciences tending to publick Advantage, and entertaining in themselves, pays to you on all Occafions, as one of the most skilful Abettors of the fame, are the Motives, SIR, that induced me to dedicate this Epistolary Account to you; in which I am to give a Proof of my future Inquiries in America, upon fuch Subjects as belong to Natural Hiflory; the Value of which you are best able to determine. The Zoophyte, however, or Animal Plant, I am going to defcribe, does not feem ever to afford any Advantage to the Publick in common Bufiness of Life: Yet, SIR, was it in my Power to chufe what I fhould first meet with, either a Subject of this Kind, or only remarkable in general, by the Defcription of which I could in fome Manner fhew how I would fpend the Time of my Travels, and embrace every Oppor-

Opportunity to pay my Respects to you ? And befides that you are doubtlefs of my Opinion, that a Searcher of Nature ought to have in his View not only the Advantage of the Publick, but chiefly the Glory of the great Maker of all Things; which last Particular I at least flatter myself to obtain, by the Account of fo fingular a Subject as the Zoophyte now before me. brought from

a Plane that appeared very fin-

IT is neceffary, before I begin this Account, to mention, that, if in the Main I shall seem to contradict myself, speaking of the fame Thing, at first as of a Vegetable, and then as of an Animal, it is only in order to express myself in a more regular and plain Manner. The Circumstances in explaining this Subject, are equally the fame with me as with those that teach Aftronomy, who, for the Sake of Instruction, represent the Heavens as the Surface of a Globe, on which the Stars appear affixt near one another; although this Notion will entirely vanish away, as foon as a Perfon Searcher

B 2

is

is arrived at the true Knowledge of the Heavens, founded on fuch imaginary Principles.

have in his View not on we

TIE CP

CAPTAIN Adrians, of the English Groenland Ship the Britannia, a Native of Jutland, is the Perfon, who, as he was last Summer on a Voyage for the Whale-Fishery, brought from the Groenland Seas two Productions of a Plant that appeared very fingular to him. He had given them to Mr. DUNZE of Bremen, once a worthy Scholar of yours, my fincere Friend, who afterwards made me a Present of one of them, and by that gave me an Opportunity to examine it in the exacteft Manner possible.

THE Captain had related, that these two Plants were drawn up with the Line, on Board of his Ship, as they were sounding the Sea, out of a clayish Ground, 236 Fathoms deep; that is, 1416 Feet; 79 Degrees, North Latitude, about 90 English Miles from Groenland. This great Latitude, to which a Searcher Searcher of Nature rarely can proceed, and the furprizing Depth, into which Naturalifts ftill more rarely can dive, are fufficient to make this Production remarkable: And had not the Captain taken particular Notice of it, which Attention one should scarcely expect from those that fail upon the Whalefishery, it would probably have continued unknown for some Time longer, if not for ever.

It is not merely by my own Judgment, when I declare this Production as new, and hitherto unknown: I shewed it to three Gentlemen of great Knowledge and Experience in those Things, *Fellows* of the *Royal Society*, . viz. to Messes. WATSON, COLLINSON, and MILLER. It was unknown to them, and they declared it to be a rare Production.

EACH of the two *Plants* was broke in three Pieces; which Accident however did not hinder me from laying it before me, according to its compleat Form and Size. As I have feen feen it in that Manner, I fhall now defcribe it accordingly.

IT had a bare Stalk, without any Leaves, on the Top of which, where the Stalk bends a little Sideways, a Flower was fix'd. Fig. 1. reprefents the whole Plant in Miniature. Its natural Size, Stalk and Flower together, is four Feet and an Half; the Flower alone is two Inches $\frac{1}{2}$ high, and measures about its Middle one Inch and a Quarter round; at the Top it is a little more close. On Account of the Notches Lengthways and across, I difcovered, at the first Sight of it, fome Likenefs to those petrified Bodies we call Encrinos, or Lilly-stones, which are supposed to be some Kind of Sea-stars petrified : But the Tops of the Flower being fibrous, had fo much the lefs any Appearance of this Petrification. The Stalk, a little below its Middle, is one Line and an Half thick, but grows gradually downwards to the lower Extremity as thick again; and gradually towards the upper End, more than once as thin. It looks thicker

thicker about two Inches and an Half underneath the Flower; but this is only as it were a Bladder, to the Infide of which the Stalk adheres, and is loft downwards in the Superficies of the Stalk. About Half a Foot from the lower End the Stalk is a little thicker than lower down. Quite below, at the fartheft End, it grows again a little thicker, where it terminates compleatly; by which one may plainly fee that nothing was broke or torn off.

THE Stalk is fquare throughout, with a Notch on every Side. It is white within, and of a Substance like to Wood, with long Filaments, and nearly as hard as Ivory, cover'd by a tender Skin, of a pale yellow Colour. At the lower End, before-mentioned, it is of a yellowish Brown upwards, and of a deep yellow Colour downwards. The Skin of this Part of the Stalk is thick and tough, through which one may feel the Continuation of the folid Stalk within it. It is still moist, and very pliable. From whence, as also from other other Circumstances already mentioned; I conjecture, that the lower Part of the Stalk, Half a Foot in Length, fluck in the Clay, and is to be taken for the Root of the Plant, if this may be called a Root.

AT the Time this Plant was taken out of the Sea, the Stalk was of a high yellow Colour, and not fo hard as it turned afterwards, but pliable; and the Stalk of the other Plant is all turned cockle-wife.

A PIECE of the lower Part of the Stalk, and the upper Part of the Root, are reprefented by *Fig.* 2. according to their natural Size.

by a trivitor Skin, of a pale yellow Colour

In order to examine the Flower more exactly, and to reftore it to its natural Form, as much as poffible, I put it for a Couple of Hours in Water: For the Captain could give no farther Account of it, but that, when taken out of the Sea, it was more opened, and of a yellow Colour, which, as I got it quite

quite dry, was turned to a deep Brown. When I took it out of the Water it was more opened, and as big again as before ; in fhort, it appeared then as reprefented by Fig. 3. The adhering Piece of the above-mentioned Bladder-like and pale yellow Skin was turned fomething Cockle-wife, and the Colour of the Flower between Yellow and Brown. It was composed of thirty Pieces, of the Shape of a Cone, but not fo regular, which I can neither call Leaves of a Flower, nor Staminas, as will appear by the following Defcription. These Pieces were all grown together at the Bottom, and fome deep Notches running obliquely together, gave the lower Parts of them the Appearance of a Flowerpot, or Chalice, (Fig. 3.) very like the abovementioned Lilly-stones. The upper Ends of them terminated into fome Cheves, not very regular. Subflance of these Pice

THE outer ones of these oblong Pieces had loofened themselves in the Water; the rest C I could

(10))

I could eafily get afunder, except five of the inner ones, which feemed at first grown together, but were at last, by the Use of a Penknife, likewise got afunder without being hurt. The outer ones are the largest, towards the Middle they are lesser and lesser. Fig. 4. shews one of the largest, separate from the Flower.

THE Back of every one of these Pieces is fomething convex, but the Infide a little hollow, because it rests on the Back of another, when the Flower is crumpled up, or not quite opened, as here. Along the Back, which is convex, run for the most three unregular Notches, transversed by a Multitude of Notches, not so regular as those upon the Lilly-stones. On the Infide two Notches are observed all along.

THE Substance of these Pieces is like a thick and tough Skin, easily to be torn when wet. The smaller Sort of these Pieces towards the Middle were tenderer, foster, and of

of a lighter Colour. After I had cut open one of the largest along the Infide, it appeared as by Fig. 5. It will be neceffary, for the explaining of this Figure, to give fome Defcription of the Shape and Situation of the inner Texture, whole Parts are fomething of a lighter Colour, and more tender.

ALONG through the Middle runs a Partition, dividing itself afunder, on the inner Part of the Piece, in two Skins, which, as they turn over to both Sides, and being grown together with the outer Skin of the Piece, caufe to both Sides of the Partition a Space refembling the Shape of a Cone, or thereabouts. Befides these two Spaces there are two more of the fame Shape, one at each Edge all along the Piece, arifing from the Skin's turning over to both Sides. Thefe two outermost Spaces, or Cavities, are empty, but the two inner ones, next to the Partition, are found of an Organick Structure within, confifting of a Number of very fmall and rishert. tender

C 2

Serve and the

tender Leaves, like Half-Moons, growing gradually towards the upper Extremity lefs and lefs, and ceafing together with the Partition and the two Skins underneath the fibrous End of the Piece. A narrow and empty Space is betwixt every one of the Leaves.

ALL this Fig. 5. will, I hope, fhew plainly enough, though I have added no Inftructions, in order not to disfigure or deface its tender Parts.

WITHIN the two inner Cone-like Spaces, or Cavities, are found many little orbicular Corpufcles, of an Orange-colour; their Situation and Size may likewife be feen by Fig. 5. And Fig. 6. reprefents one of them magnified. I could not find any of thefe orbicular Corpufcles, which I took for the Seeds, betwixt the juft mentioned little Leaves, they being all outward of them, though between the Partition and the Skins that were turned over. A good many were alfo found underneath

neath the Partition and the Leaves, that reached not quite down to the lower End of the irregular Cone-like Pieces. Some of the Seeds appeared lefs than the reft, yet the larger and the fmaller ones lay promifcuoufly together, without Regard of their Situation. I fqueezed one, and beholding the white tender Matter that came out, through a Magnifying Glafs, I observed it to confist thoroughly of fome very little, but transparent, and Globular Bubbles, as by Fig. 7. When I had laid one Corn on the Point of a Knife, and holding it over a Flame for the Space of a Second, or thereabouts, it burft with a fudden, and, as I may fay, frightening little Crack, and the remaining torn Skin or Shell, looking then white, leapt fuddenly back in a Bow-like Courfe, refting at about two Inches Distance from its former Place, upon the Edge of the Knife. The Burfting of fo fmall a Corn could fcarcely have caufed fuch a Crack, but that all the Bubbles contained, being above a Hundred in a Corn, burft by Means of the Heat at once. HITHERTO

HITHERTO I have spoken of this new Sea-Production, as of a Vegetable : But

Seeds appeared lefs than the rolt, yet the

In nova fert animus mutatas dicere formas Corpora,—

I fancesed one, and 'I cholding the white

And, instead of Animals being, before Ovid's Time, generally changed into Vegetables, I shall now declare this Sea-Plant to be a Sea-Insect.

AFTER having made and wrote down my Remarks upon this ftrange Sea-Production, the Fellow of it fell into the Hands of Mr. JOHN ELLIS, a Merchant of great Skill in Natural Hiftory, efpecially in the Kingdom of Plants; he had it from Mr. COLLINSON, a Merchant, and Fellow of the Royal Society, your worthy Friend, to whom Mr. DUNZE had made a Prefent of it. Mr. EHRET, a famous Painter of Plants, who is very well known to you, got me acquainted with Mr. ELLIS. I went to him, in order to

neath the Partition and the Leaves, that

to fee his fine Collection of English Sea-Plants. The first Thing I faw was this very Sea-Production, a Painter being employed to take a Copy of it. Mr. ELLIS obferving my Attention was fixed upon it, began to give me an Account of that new Phenomenon in the Kingdom of Nature, as far as he knew it. I, interrupting his Difcourfe, faid, Sir, I know this Plant; I have it myfelf.----What ! replied he, a Plant? No, no, it is an Animal; it is a Polypus. I would not begin my first Visit with contradicting him, therefore liftened to what he had farther to fay of it. He affured me every one of the oblong hollow Pieces was a Polypus. The upper Part of fuch a Piece, which he had pasted upon some Paper, with its Fibres extended, and the Draught he had made of it, looked indeed more like a Polypus than a Flower-leaf, efpecially on Account of the Mouth-like Opening in its Middle. Mr. ELLIS had alfo caufed a Picture to be drawn of fome Part of the fuppofed Flower or Bunch of the Polypus, exactly after cerning

(16)

after the Situation and Shape of a Polypus: But neither he, nor I, having feen any Thing like his two Copies on the Original, I was obliged to fufpend my Judgment concerning his Opinion.

Fhenomenon in the Kingdom of Nature, 23

IN the mean Time he shewed us (Mr. Dunze was also prefent) his large and welldisposed Collection of English Sea-Plants, which one should scarcely imagine in Europe of such a Variety and Beauty, in regard to their fine Figurations, as well as the Liveliness of their Colours; but an evident and palpable Proof was here to be met with.

The upper Part of fuch

DUS.

BUT why do I call them Sea-Plants? Moft of these supposed Sea-Plants, excepting the Alga, or Sea-Weed, and the Titanoceratophyton, or Horn-Plant, were Nothing but Vegetable-like Habitations of Sea-Infects, hitherto known by the Names of little Corals, Sea-Moss, Sea-Sponges, &c. I had no more any Doubt remaining with me concerning

cerning the remarkable Difcovery Mr. ELLIS had made, with a great Deal of Patience and Attention, by the Use of a Microscope, he being fo kind as to convince us of the Truth, by applying his Microfcope upon fundry Moffes of the little Coral. It will, doubtless give you a great deal of Satisfaction, Sir, when I here acquaint you that Mr. ELLIS's Book, containing his Difcoveries by the Microscope, is in the Press, and will probably be published the latter End of this Year : I have feen already a good many Cuts to it at his Houfe. I fpeak justly of this Work, as of new Difcoveries. For although the Corals and Corallous Sea-Plants are already known to be the Habitations of feveral Sea-Vermine, No-body has yet made any fuch Difcoveries, concerning the above-mentioned fmaller Sorts of Vegetable-like Sea-Productions.

THIS Excursion has rather brought me nearer to, than farther off from my Purpofe. I am now in a Capacity to confess with more Certainty than before, that I take D this

inotivric sud ,

this Sea-Production now myfelf for an Ani-o mal, or Animals. The Eyefight of fo many Sea-Productions, that looked all like real Plants, taught me, that they belonged, notwithstanding, to the Animal Kingdom; and my Ideas concerning Subjects of this Kind, grew gradually fo animal, by the Sight of them, that, looking at laft once more at my new Groenland Sea-Growth, I could fee no more any Thing like a Vegetable about it but the Stalk, and its having fluck fast in the Bottom of the Sea; hence I declared it with Mr. ELLIS, without any farther Hefitation, to be a ZOOPHYTE, or, ANIMAL PLANT; but could not venture yet to agree with him in its being of the Polypus Kind.

THIS Inftance of having confidered one Subject two different Ways, made me obferve, with a moral Pleafure, but phyfical Difpleafure, the Influence our Judgment has on our Senfes in certain Cafes, by which Naturalifts, imposed by their Imagination, find Things eafily fo in Nature, as they at firft

first believe them to be. This strange Subject of my prefent Discourse, was given me by the Name of a Sea-Plant: I took it as fuch, and fuppofing this, I was only furprifed at not finding all the usual Parts of a Plant, and its being for the most quite differently shaped. Leaves I faw none; but these are no effential Parts of a Plant. I found a Stalk, and what was still more, a Flower; the Shape fo different from all other Flowers could not make me believe it was none; as I was acquainted with many ftrangely fhaped Flowers and Fruit-bearing Plants, efpecially among the Cryptogamic Clafs of Plants. So much the eafier I perfuaded myfelf of the yellow round Corns, to be the Seeds of the Plant.

3

Mr. ELLIS, on the contrary, being then occupied in proving, and from very good Reafons indeed, that many of the Sea-Plants, hitherto taken for Vegetables, were Animals, and most of them Polypuses, went with this Notion directly to the Contempla-D 2 tion

one than in the other, he required me to

tion of this new Sea-Production. He faw a Number of Animals where I had feen a Flower; he faw fo many Polypufes, as I had feen Pieces of the Flower; he took that for a Supporter of the Polypufes, what I had taken for a Stalk; and called Eggs, what I had called Seeds. I was increasing the Vegetable Kingdom, by adding a new Subject, and he was enlarging the Number of Animals.

Flowers could not make me believe it was

Ar my paying him a Vifit, he had not feen yet the round Corpufcles obferved by me, which he faid were Eggs: And as he did not chufe to cut open a Piece of his own, and being defirous at the fame Time to fee whether there was not fomething more obfervable in one than in the other, he required me to fend him mine for looking at it. I fent it him, and he foon returned it with a Letter, containing, "That he was ftill convinced of "this Subject's being of the Polypus Kind, " and the Rows of Seed-like Particles No-" thing elfe but the Eggs of the Animal, he " having " having obferved them to grow larger as " they came out higher." This, I must fay, I never could obferve, tho' I own they were of a different Size.

fingle fices, in their natural Shope and

BEING now nearly convinced that this Subject was at least more animal than vegetable, I thought it neceffary to examine more exactly that Part which would entirely convince me of its being an Animal. Having, therefore, the Flower-like Bunch once more put into Water for fome confiderable Time, in order to have it fpread, I divided afunder the Fibres of one of the largest fingle Pieces with a Penknife, which fucceeded very eafily, and I could plainly fee thefe Fibres were not grown together. I found eight fuch Fibres upon each fingle Piece I had examined after this Method; each Fibre running to a Point at the Top, and Nothing but very fine and fmall Threads shooting out on their Sides. Underneath, where these Fibres join with the fingle Piece, that appeared hollow and of the Shape of a Cone, the Skin extended upwards

(22)

upwards with a Mouth-like Aperture; which is, indeed, to be taken for the real Mouth of the Animal. Fig. 8. fhews thefe Fibres and the Mouth, together with fome Part of the fingle Piece, in their natural Shape and Size. I cannot fay I have feen thefe Parts in fuch a Situation by Nature; but to fhew the Shape of the Fibres and Mouth, I would not have it omitted; as it is probable (provided this Production be a real Animal) that thefe Fibres frequently turn themfelves into fuch a Situation, viz. whenever the Animal chafes its Rapine.

IF Mr. ELLIS reckons this Infect among the Polypufes, merely on Account of these Fibres or Tentacles, which ferve the Animal for feeling about, I have nothing against it. But I must attribute the Fault to my Eyes, if I remark some other Circumstances, too much receding from the Nature of Polypuses, that prevent me at this Time from reckoning it amongst them; fuch are the Stalk and the Eggs. Those Parts of other Polypuses, as do not belong to

HIDRES OF GARAGE AND AND

to their Bodies immediately, but only ferve for fastening them to some other Thing, are, for aught I know, never fo much different in Length and Substance from the Body of the Polypus itself, and this Part or Stalk has never fo much the Appearance of a Vegetable. 'Tis true, fome Sorts of Sea-Infects I faw at Mr. ELLIS's, and which he alfo called Polypufes, have Supporters of a Substance as different from their Bodies as this; but they are not fo firmly grown together with the Bodies of the Polypufes, nor continuing in a Piece, as is the Cafe with our prefent Sea-Infect. The Eggs are still of greater Weight to me for my Diffention; methinks the Notion of a Polypus imports a Propagation, not by Eggs, at least not fo visible ones, but rather after the Manner of Vegetables.

I HAVE faid above, and it will also appear by my Account, that this Sea-Animal is fomething like a Sea-Star, called a Lilly-Stone:

(24))

Stone : Mr. ELLIS himfelf has observed this, but would not allow the Name upon that Account. It also plainly appears to be neither a Sea-Star of this, nor any other Kind hitherto known. Yet I do not fee any Reafon why it would be too bold to affert it to be a Kindred of Sea-Stars: For if the whole Bunch, and every Part of it, fpreads about, as it probably does, is not this the Figure of a large Star? Another little Star alfo appears on every Point of the fame. And might not therefore this new Sea-Infect be called Afterias Zoophytos composita, that is, a compounded Zoophyte-Sea-Star? The Shape and Substance of this Infect have, at leaft, more the Similitude of common Sea-Stars, and particularly of the Medufa's Head, than that of a Poly-It also refembles more a Sea-Star, on pus. Account of its inward Structure, as well as on Account of its Mouth in the Middle. But, you will fay: For what is the Stalk? I afk again, instead of an Answer: For what is a Stalk to the Lilly-stones, which notwithftanding

ftanding are univerfally taken for a kind of Sea-Stars? Truly it ferves them for being faftened to fomething. None indeed of the natural Sea-Stars hitherto known has fuch a Stalk, and all of them have the Faculty to change their Places: But have not most of the Muscle-kind the fame Faculty! And yet, fome Sorts of them are constantly fastened to one Place. I will carry my Conjectures no farther, but rather wait with an impartial Mind, till I am convinced of the contrary.

LATELY, as I had the Honour to attend at a Meeting of the Royal Society, a fhort Account of Mr. ELLIS's, concerning this very Zoophyte, was just reading. Mr. ELLIS, who was prefent, shewed me his Draughts of the fame, among which, there was one reprefenting fome Part of this compounded Animal, in the Situation, as he supposes it, to make its Motions and Windings in the Sea. This Figure is well enough to explain his Conjectures: But Mr. ELLIS cannot positively E affirm affirm, that this Animal ever takes fuch a Shape; and therefore I purpofely left his Figure away from this Account, efpecially as I would keep as clofe as poffible to that only which I had feen. I alfo took Notice of the Bunch in Mr. ELLIS'S Draught, which was too ftiff, and too regular, in Comparifon to the Original, at the Time it came into his Hands and mine; but this was the Painter's Fault.

Mind, this I am convinced of the contr

I DO NOT doubt but there may be fome Naturalifts, who will take this Sea-Production for a mere Vegetable, notwithftanding the great Probability of its being an animal Plant. I am fatisfied with having defcribed it as nearly as poffible; it will be equal to me what Name fhall be given to it. But I fhall, in this Cafe, fubmit to your Authority, SIR, being convinced of your deep Penetration, equally effecemed by all the Searchers of Nature, affuring you, at the fame Time, that

ATTEND D

(27)

that no Man can, with a more fincere Heart and profounder Refpect, be,

SIR,

London, Nov. 16, 1753. Your most obedient Servant, CHRISTLOB MYLIUS.

FINIS.



