

FAUNA

LITTORALIS NORVEGIÆ

UDGIVET

AF

J. KOREN og Dr. D. C. DANIELSSEN,

OVERLÆGE.

3^{DE} HEFTE.

MED 16 TAVLER.



BERGEN.

TRYKT HOS J. D. BEYER.

1877.

FAUNA
LITTORALIS NORVEGIÆ

EDITED

BY

J. KOREN AND Dr. D. C. DANIELSSEN,

CHIEF-PHYSICIAN.

PART 3.

WITH 16 PLATES.

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BESKRIVELSE

OVER

NOGLE NYE NORSKE COELENTERATER.

AF

J. KOREN & D. C. DANIELSSEN.

PHELLIA TUBICOLA, Nov.

(Tab. 9, Fig. 1, 2).

Kroppen, som er cylindrisk, langstrakt, omtrent 4 Gange saa lang, som bred, og sparsomt besat med yderst smaa gjennemborede Vorter (cinclides), — er omgivet af et hudagtigt Rør, hvis nederste Del er fastvoxet til Basaldelen, lige ved den egentlige Fod; men hvis øverste Del danner en fri, afrundet Rand (Fig. 1, 2 a). Denne rørformige Beklædning er egentlig en Forlængelse af Epidermis, der søkformig voxer op over Dyrets Krop til omtr. 10 Mm. nedenfor Skiven. Det saaledes fremkomne Rør, som er 20 Mm. langt, temmelig fast, er ujævnt paa den ydre, men glat paa den indre Flade, og bestaar af en gjennemskinnende baade farve- og structurløs Membran, hvori Sandkorn ere tykt incrusterede. Basaldelen er bredere end Kroppen, udvider sig skiveformigt og er fæstet til Skjæl eller Stene. Skiven er plan, bredere end Basaldelen og forsynet med 3 Rækker retractile, temmelig lange Tentakler, 48 i Antal. I den ydre Række er der 24; i den indre er der 12, og her ere de længere end i den ydre Rad, og i den mellemste er der ligeledes 12. Mundaabningen, der er rund, kan skydes op til en kegleformig Fremstaaenhed.

Rørets Farve er graa-brun med lidt mørkere Pletter. Kroppen er kjødrød, halvgjennemskinnende, hvorved Længdemusculaturen bliver synbar og danner hvidlige Længdestriber. Skiven er rosenrød, og forsynet med lysere Striber, der gaa fra Mundranden til Grunden af de indre Tentakler. Samtlige Tentakler ere ligesom Skiven rosenrøde.

Dyret kan trække sig ganske ind i Røret, saa at Skiven fuldkommen skjules; men naar det er udstrakt, rager Skiven 10—12 Mm. over Rørets frie Rand.

Vi fandt 3 Exemplarer paa 200 Favnes Dyb, hvoraf de to vare fæstede til døde Skaller af *Lima excavata*, og det tredje paa et Coralstykke i Korsfjorden ved Bergen.

ARTSCHARACTEREN.

Overhuden fast, sandincrusteret, dannende et fuldstændigt Rør, sammenvoxet til Basaldelen. Denne skive-

DESCRIPTION

OF

SOME NEW NORWEGIAN COELENTERATES.

BY

J. KOREN & D. C. DANIELSSEN.

PHELLIA TUBICOLA, Nov.

(Tab. 9, fig. 1, 2).

The body, which is cylindrical, elongated, about 4 times as long as broad and sparingly covered with extremely small loopholes (cinclides), is enclosed in a membranous tube, the lower part of which is connate with the basal part of the animal close to the proper foot, but the upper part of which forms a free rounded margin (fig. 1, 2 a). This tubular covering is property a continuation of the epidermis, which grows, sack-like, up over the animal's body to about 10 Mm. below the disc. The tube thus produced, which is 20 Mm. long and rather solid, is uneven on the exterior, but smooth on the inner surface, and consists of a translucent, colorless and structureless membrane, in which grains of sand are thickly incrustated. The basal part is wider than the body, expands, disc-like, and is attached to shells or stones. The disc is plane, wider than the basal part and furnished with 3 rows of retractile, rather long tentacles 48 in number. In the exterior row, there are 24; in the interior, 12; and here they are longer than in the exterior row; in the middle row, there are also 12. The oral aperture, which is round, can be raised to a conical prominence.

The color of the tube is greyish brown, with rather darker spots. The body is carnation red, semi-translucent, whereby the longitudinal muscular system becomes visible, forming whitish longitudinal stripes. The disc is rosy red, with lighter stripes going from the margin of the mouth to the base of the interior tentacles. All the tentacles are, like the disc, rosy red.

The animal can withdraw itself entirely into the tube; so that the disc is completely concealed; but when it is extended, the disc projects 10—12 Mm. over the free margin of the tube.

We found 3 specimens at the depth of 200 fathoms, of which two were attached to dead shells of *Lima excavata*, and the third on a piece of coral, in the Korsfjord at Bergen.

CHARACTERISTICS OF SPECIES.

The cuticle (Epidermis) solid, incrustated with sand, forming a complete tube, connate with the basal part.

formigt udvidet. Kroppen cylindrisk, langstrakt. 48 Tentakler i 3 Rækker. Rørets Farve graabrun; Kroppens kjødrød; Skivens og Tentaklernes rosenrød.

PHELLIA ABYSSICOLA, Nov.

(Tab. 9, Fig. 3, 4).

Kroppen er cylindrisk, omtrent ligesaa lang, som tyk og beklædt overalt med en temmelig tyk Epidermis, der er blød, ikke meget stærkt adhæreret til Legemet, og indvævet med fint Sand og Ler (Fig. 3 a). I denne Overhud opdages hist og her fine Aabninger, der svare til smaa vorteformige Forhøininger (loop-holes, cinclides), som findes i stor Mængde rundt om paa Kroppen; men som først iagttages, naar Overhuden er fjernet, hvilket kan ske med temmelig Lethed. Basaldelen er noget videre end den øvrige Del af Kroppen, hvis øverste Rand er glat og afrundet. Skiven er plan og forsynet med 56 retractile, lige lange Tentakler, der staa i to Rækker, — 28 i hver. Munden er rundagtig, foldet. Farven: Overhuden er graabrun, isprængt mørkere brune Pletter. Naar Overhuden er borttagen, frembyder Kroppen en bleg Kjød-farve. Skiven er mørk brunrød, forsynet med lysere Striber, der udgaa fra Mundranden henimod de indre Tentakler. Svælget og Maven har samme Farve, som Skiven. De ydre Tentakler ere bleg-gulrøde, de indre ere paa deres nederste Halvdel og paa hele den indre Flade brunrøde, medens den Flade, der vender til den ydre Tentakelrad, er betydelig blegere.

Af denne Art fandt vi to Exemplarer fæstede til Stene i Korsfjorden paa 250 Favnes Dyb.

ARTSCHARACTEREN.

Overhuden tyk, løs, sandincrusteret, overalt fastvoxet til Kroppen. Basaldelen lidet udvidet. Tentaklerne 56 i to Rækker. Overhudens Farve graabrun med mørkere Pletter. Kroppen bleg-kjødrød. Skiven mørk-brunrød med lysere Striber. De ydre Tentakler bleg-gulrøde, de indre brune ved Grunden og paa den indre Flade; men blegere forøvrigt.

Ved den engelske Kyst er der ifølge Gosse funden 4 Arter af Slægten *Phellia*, hvilke ere beskrevne af ham. — Saavidt os bekendt er der ved de norske Kyster ikke tidligere fundet nogen Art, der kan henføres til denne Slægt; men vi have Grund til at antage, at der i vor Koralkregion vil findes flere, naar man først er bleven opmærksom paa dem.

Zoanthidernes Familie har af de forskjellige Forfattere været inddelt i flere Slægter, der stundom ere blevne reducerede, stundom forøgede i Antal, alt eftersom der har været tillagt Tilheftningsmaaden eller andre mindre

The latter developed disc-like. The body cylindrical, elongated 48 tentacles in 3 rows. The color of the tube greyish brown; that of the body carnation red; that of the disc and tentacles rosy red.

PHELLIA ABYSSICOLA, Nov.

(Tab. 9, fig. 3, 4).

The body is cylindrical, about as long as it is thick and covered everywhere with a rather thick epidermis, which is soft, not very strongly adhering to the body, and interwoven with fine sand and clay (fig. 3 a). In this outer skin, we perceive minute openings here and there corresponding to small wart-like elevations (loop-holes, cinclides) which are found in great numbers round about on the body, but which are only noticeable when the epidermis is removed, which may easily be effected. The basal part is somewhat broader than the other part of the body, the upper margin of which is smooth and rounded. The disc is plane, and furnished with 56 retractile, equally long tentacles standing in 2 rows, 28 in each. The mouth is roundish and corrugated. The color of the epidermis is greyish brown, speckled with darker brown spots. When the epidermis is removed, the body exhibits a pale carnation color. The disc is dark brown-red, with lighter stripes proceeding from the oral margin towards the inner tentacles. The œsophagus and the stomach have the same color as the disc. The exterior tentacles are pale yellowish red; the interior are on their lower half, and on all the interior surface, brownish red; while the surface which turns towards the outer row of tentacles, is considerably paler.

Of this species we found 2 specimens attached to stones, in the Korsfjord at the depth of 250 fathoms.

CHARACTERISTICS OF SPECIES.

The epidermis thick, loose, incrustated with sand, everywhere connate with the body. The basal part a little enlarged. The tentacles 56 in two rows. The color of the epidermis, greyish brown with darker spots. The body pale carnation. The disc, dark brown-red with lighter stripes. The exterior tentacles, pale yellowish red; the interior, brown at the base and on the inner surface, but otherwise paler.

On the English coast, there have been found, according to Gosse, 4 species of the genus *Phellia*, which have been described by him. So far as we know, there has not previously been found on the Norwegian coasts any species that can be referred to this genus; but we have reason to presume that in our coral region, several will be found, when once attention has been drawn to them.

The family of the Zoanthidæ has been by the various authors divided into several genera, which sometimes have been reduced, sometimes increased in number, accordingly as more or less importance has been ascribed to the

de i Tidernes Løb opstillede Slægter: Zoanthus, Palythoa, Mammillifera, Sidisia, Corticifera, Epizoanthus, har Milne-Edwards kun godkendt to, nemlig Zoanthus, som udbreder sig med rodformige Stoloner, og Palythoa, hvis Udbredning er i Form af en Plade eller et Teppe. Gosse er imidlertid ikke bleven staaende ved disse to Slægter, men har reduceret dem til én, nemlig Zoanthus, Cuv., idet han ikke har kunnet erkjende, at Befæstningsmaaden egner sig til deraf at danne Slægter. Han har paavist, at hos Slægten Zoanthus forekommer de forskjelligste Maader, paa hvilke Dyret befæster sig, uden at noget andet Charactermærke, der skulde kunne begrunde en ny Slægt, har været at opdage.

Foruden de ved den norske Kyst tidligere fundne Arter af Zoanthus, nemlig Zoanthus (Mammillifera) incrustatus, Düb. & Kor. og *Z. arcticus* Sars, have vi fundet en tredje, som nu skal beskrives.

ZOANTHUS NORVEGICUS, Nov.

(Tab. 9, Fig. 5, 6).

Fra den fælles Grund (Coenosark) hæver Polyperne sig i en snart perpendicular, snart horizontal, snart skjev Stilling (Fig. 5). Polyperne ere kølleformige med en smalere Basaldel, der er cylinderformig. Den øverste Del er henved dobbelt saa stor i Omkreds, som Basaldelen, og ganske afrundet, naar Tentaklerne ere indtrukne. Kroppen har en graagul, tynd, men fast Overhud, hvori fin Sand er incrusteret, og indenfor denne Epidermis er den egentlige Hud bleg, rosenfarvet, spillende lidt i det gule. Munden er aflag, lidt conisk fremstaaende og omgivet af en mørkere, rosenfarvet Ring, hvorfra fine, hvide Striber gaa straalformigt hen til de indre Tentakler. Skiven er, naar den er fuldkommen udslaaet, plan, forsynet paa dens ydre, frie Rand med bladformige Lapper, hvori ligeledes fin Sand er incrusteret, og hvis Antal svarer til den ydre Tentakelrække. Tentaklerne sidde afvæxlende i to Rader; men naar Polyppen er fuldkommen udstrakt, og Skiven med Tentaklerne fuldstændigt udslaaede, ser det ud, som om der kun var én Rad Tentakler. Hos det fuldvoxne Dyr er der 18 Tentakler i hver Række.

I den ydre Række ere Tentaklerne omtr. 7 Mm. lange, i den indre ere de noget længere. Størrelsen af Polyperne varierer temmelig meget; de største, vi observerede, vare 25 Mm. høje, 5 Mm. brede ved Basaldelen og 8 Mm. ved Skiven. Paa yngre Exemplarer var Antallet af Tentaklerne 15 i hver Række, enkelte havde 16.

Zoanthus norvegicus sidder dels enkeltvis, dels flere sammen; men hyppigst i store Grupper, der kunne indtage en knyttet Haands Omfang, og hvori mere end halvhundredede Polyper ere fæstede ved det fælles Coenosark, der beklæder snart Svampe, saasom *Tethea cranium*, snart Skaller af *Lima excavata* og stundom Stammer af *Primnoa lepadifera* og *Paragorgia arborea*.

Of the genera established in the course of time: *Zoanthus*, *Palythoa*, *Mammillifera*, *Sidisia*, *Corticifera*, *Epizoanthus*, *Milne-Edwards* has only acknowledged two, namely *Zoanthus*, which expands itself with root-shaped Stolons, and *Palythoa*, the expansion of which is in the form of a plate or a carpet. Gosse has however not stopped at these two genera, but has reduced them to one, namely *Zoanthus*, Cuvier; as he has not been able to admit that the mode of attachment is appropriate to the formation of genera. He has shewn that the genus *Zoanthus* exhibits the most different modes in which the animal attaches itself, without any other characteristic mark by which a new genus might be established, being discoverable.

Besides the species of *Zoanthus* previously found on the Norwegian coast, namely *Zoanthus* (*Mammillifera*) *incrustatus* Düb. & Kor. and *Z. arcticus* Sars, we have found a third, which shall now be described.

ZOANTHUS NORVEGICUS, Nov.

(Tab. 9, fig. 5, 6).

From the common base (Coenosark) the polyps rise in a sometimes perpendicular, sometimes horizontal, sometimes slanting position (fig. 5). The polyps are club-shaped, with a smaller basal part which is cylindrical. The upper part is about double as large in circumference as the basal part and quite rounded when the tentacles are retracted. The body has a greyish yellow, thin, but firm epidermis, wherein fine sand is incrustated; and inside of this epidermis the proper skin is pale rose-colored, with a tinge of yellow. The mouth is oblong, projecting a little conically, and surrounded by a darker rose-colored ring, from which fine white stripes go radially to the interior tentacles. The disc is, when completely expanded, plane, and has on its exterior free margin leaf-like lobes, in which likewise fine sand is incrustated, and the number of which corresponds to that of the outer row of tentacles. The tentacles are situated alternately in two rows; but when the polyp is completely extended, and the disc with the tentacles entirely expanded, it seems as if there was only one row of tentacles. In the adult animal there are 18 tentacles in each row.

In the exterior row, the tentacles are about 7 Mm. long; in the interior they are somewhat longer. The size of the polyps varies considerably: the largest we observed were 25 Mm. high, 5 Mm. broad at the basal part, and 8 Mm. at the disc. In younger specimens, the number of tentacles in each row was 15; some had 16.

Zoanthus norvegicus exists partly single, partly several together, but frequently in large groups that may occupy as much space as a closed hand wherein more than 50 polyps are attached by the common coenosark, which may cover sometimes sponges, (*Tethea cranium*) sometimes shells of *Lima excavata*, and now and then stems of *Primnoa lepadifera* and *Paragorgia arborea*.

Vi have fundet den i Korsfjorden ved Bergen paa en Dybde af 300-Favne, blandt Koraller. Koren har seet hos Professor G. O. Sars Exemplarer af den samme Art, som han havde fundet paa lignende Dyb i Coralregionen, hvor den forresten forekommer i stor Mængde.

Zoanthus norvegicus nærmer sig mest til *Z. anguicoma*, Norm. og *Z. Couchii*, Johnston, men adskiller sig dog væsentlig fra Begge.

Zoanthus anguicoma har et Coenosark, der danner smale Baand, hvorfra Polyperne reise sig; disse ere kun lidet bredere foroven (næsten cylindriske), have omtr. 34 Tentakler, der ere meget længere end Skiven. Farven er blegrød-hvid.

Zoanthus Couchii forekommer ligeledes i baandformige Udbredninger. Polyperne ere cylindriske. Tentaklerne 28, temmelig korte. Kroppens Farve er bleg-brun af det incrusterede Sand, forøvrigt farveløs og transparent; Skiven gennemskinnende graalig-rød med fine hvide Pletter; Tentaklerne næsten farveløse med hvide Spidser, og Munden omgivet af en hvid opak Ring.

Vor Art forekommer i større og mindre klumpedannede Grupper med et fast incrusteret Coenosark, der udbreder sig over store Flader, og hvorfra de kølleformede Polyper udspringe. Tentaklerne sidde i to Rækker, 18 i hver, og de indre ere længere end Skiven i udstrakt Tilstand.

ARTSCHARACTEREN.

Coenosarket fast, læderagtigt, udbredt i store Flader og stærkt incrusteret med brungul Sand. Polyperne kølleformede, tæt siddende i store Grupper. Tentaklerne i 2 Rækker, 18 i hver; de indre længere end Skiven. Overhuden graagul, incrusteret. Skiven bleg-rosenrød med hvide Striber. Munden omgivet af en mørkere rosenfarvet Ring. Tentaklerne rosenrøde.

FORKLARING OVER FIGURERNE.

- Tab. 9, Fig. 1. *Phellia tubicola*, naturlig Størrelse.
 Fig. 2. *Ph. tubicola*, forstørret; *a* Rørets frie Rand.
 Fig. 3. *Ph. abyssicola*, naturlig Størrelse; *a* Overhuden.
 Fig. 4. *Ph. abyssicola*, seet fra oven.
 Fig. 5. En Gruppe af *Zoanthus norvegicus*, med udstrakte og indtrukne Tentakler.
 Fig. 6. *Z. norvegicus*, forstørret; *a* Coenosark.

Anmærkning. Paa Tabula 4 findes afbildet under Fig. 8 *Cerianthus Lloydii*, liggende i det aabnede hudagtige Rør, samt under Fig. 9 Mundpartiet med Tentaklerne af samme Dyr. Dengang det Dyr blev tegnet, antog jeg (Danielssen) det for en ny Art, som blev benævnt *Cerianthus borealis*, men vi bleve senere opmærksomme paa, at det var Gosse's *Cerianthus Lloydii*. Den fandtes først af os i Moldefjorden, og var da ny for Skandinaviens Fauna. Senere er den af os funden i Bergensfjorden. Den forekommer paa dyndet Bund paa en Dybde fra 20 til 50 Favne.

We have found it in the Korsfjord at Bergen, at the depth of 300 fathoms among corals. Koren has seen in the possession of Professor G. O. Sars, specimens of the same species which he had found at the same depth in the coral region, where moreover it occurs in great numbers.

Zoanthus norvegicus resembles most *Z. anguicoma*, Norm. and *Z. Couchii*, Johnst. but differs nevertheless essentially from both of them.

Zoanthus anguicoma has a Coenosark which forms small ribbons, whence the polyps rise: the latter are only a little broader above (nearly cylindrical); they have about 34 tentacles, which are much longer than the disc. The color is pale reddish white.

Zoanthus Couchii occurs also in ribbon-like extensions. The polyps are cylindrical. The tentacles 28, rather short. The color of the body is pale-brown from the incrustated sand, otherwise the body is colorless and transparent. The disc is translucent, greyish red with fine white spots. The tentacles nearly colorless with white points, and the mouth surrounded with a white opaque ring.

Our species occurs in larger and smaller clod-like groups, with a firmly incrustated Coenosark extending itself over large surfaces, and whence the club-shaped polyps proceed. The tentacles are situated in two rows, 18 in each, and the interior ones are longer than the disc, when they are extended.

CHARACTERISTICS OF SPECIES.

The Coenosark solid, leathery, spread over large surfaces and strongly incrustated with brownish-yellow sand. The polyps club-shaped, situated closely in large groups. The tentacles in 2 rows, 18 in each; the interior ones longer than the disc. The epidermis greyish yellow, incrustated. The disc, pale rose-colored with white stripes. The mouth surrounded with a darker rose-colored ring. The tentacles rose-colored.

EXPLANATION OF THE FIGURES.

- Tab. 9, fig. 1. *Phellia tubicola*, natural size.
 Fig. 2. *Ph. tubicola*, magnified; *a* the free margin of the tube.
 Fig. 3. *Ph. abyssicola*, natural size. *a* the upper cuticle (Epidermis).
 Fig. 4. *Ph. abyssicola*, seen from above.
 Fig. 5. A group of *Zoanthus norvegicus* with extended and retracted tentacles.
 Fig. 6. *Z. norvegicus*, magnified; *a* Coenosark.

Note. In Tab. 4, there is delineated fig. 8 the *Cerianthus Lloydii*, lying in the opened skin-like tube; also fig. 9 the oral part, with the tentacles, of the same animal. When this animal was drawn, I (Danielssen) considered it to be a new species which was called *Cerianthus borealis*; but we subsequently perceived that it was Gosse's *Cerianthus Lloydii*. It was found first by us in the Moldefjord and was at that time new as regards the Fauna of Scandinavia. We found it afterwards in the Bergensfjord. It occurs on miry bottom at a depth of 20 to 50 fathoms.

10, 11, Tab. 3.

Basis (pes sterilis) 1—2" lata, sæpius lobata, membranacea, expansa, aliena corpora obducens. Stipes erectus, cylindricus, tripollicaris, $\frac{1}{3}$ " crassus, undique ramis densis obsitus; rami pollicares aut minores, apice obtuse rotundato, ramulis similibus brevioribus præditi. Polypi magni, in verrucas (columnas) fere hemisphæricas octoradiatas retractiles. Color pallide miniaceus seu aurantiacus, basi rubicundo-grisea aut plumbea, polypis roseo-albis hyalinis.

Hyppig ved Finmarken, f. Ex. ved Vadsø, Øxfjord etc. paa 60—100 Favnes Dyb og, som jeg af Exemplarer i Kjøbenhavns Universitetssamling har seet, ogsaa ved Grønland. Den har nogen Lighed med den middelhavske *Alcyonium palmatum*, Pallas; men adskiller sig fra denne, som kun har faa og fingerformede, i samme Plan stillede Grene, ved sine rundtom Stammen (dog med Tilbøilighed til at ordne sig i samme Plan) staaende talrige (hos 3" høie Exemplarer indtil 20—24 i Tallet) tætsiddende, i Enden but tilrandede Grene, hvilke atter ere besatte med flere eller færre (1—10) korte Smaagrene.

FORKLARING OVER FIGURERNE.

Tab. 3, Fig. 8. *Alcyonium fruticosum*, naturlig Størrelse.

Fig. 9. En Polyp, forstørret, i hvis Hud sees Kalkspicler. *a* indtrukne Tentakler; *b* Mave; *c* Mesenterialfilamenter; *d* Kalkspicler.

Fig. 10. En Gruppe indtrukne Polyper, lidt forstørret.

Fig. 11. Kalkspicler. *a*, *b*, *c* forskellige Kalkspicler.

¹⁾ Forhandlinger i Videnskabselskabet i Christiania, Aar 1860, pag. 140.

with fig. 8, 9, 10, 11, tab. 3.

Basis (pes sterilis) 1—2" lata, sæpius lobata, membranacea, expansa, aliena corpora obducens. Stipes erectus, cylindricus, tripollicaris, $\frac{1}{3}$ " crassus, undique ramis densis obsitus; rami pollicares aut minores, apice obtuse rotundato, ramulis similibus brevioribus præditi. Polypi magni, in verrucas (columnas) fere hemisphæricas octoradiatas retractiles. Color pallide miniaceus seu aurantiacus, basi rubicundo-grisea aut plumbea, polypis roseo-albis hyalinis.

Frequent in Finmark, for instance at Vadsø, Oxford &c at the depth of 60—100 fathoms, and, as I have seen from specimens in the collection of the university in Copenhagen, also near Greenland. It has some resemblance to the Mediterranean *Alcyonium palmatum* Pallas, but differs from the latter, which has only a few finger-like branches placed in the same plane, by its numerous branches standing round about the stem (yet with a tendency to arrange themselves in the same plane). In specimens 3" high, these branches were up to 20—24 in number, situated close together, and obtusely rounded at the extremity. The branches are moreover furnished with a greater or less number (1—10) of short small off-shoots.

EXPLANATION OF THE FIGURES.

Tab. 3, fig. 8. *Alcyonium fruticosum*, natural size.

Fig. 9. A polyp, magnified, in the skin of which calcareous spicula appear; *a* retracted tentacles; *b* stomach; *c* mesenterial filaments; *d* calcareous spicula.

Fig. 10. A group of retracted polyps, slightly magnified.

Fig. 11. Calcareous spicula. *a*, *b*, *c* various calcareous spicula.

¹⁾ Forhandlinger i Videnskabselskabet i Christiania, Aar 1860, pag. 140.