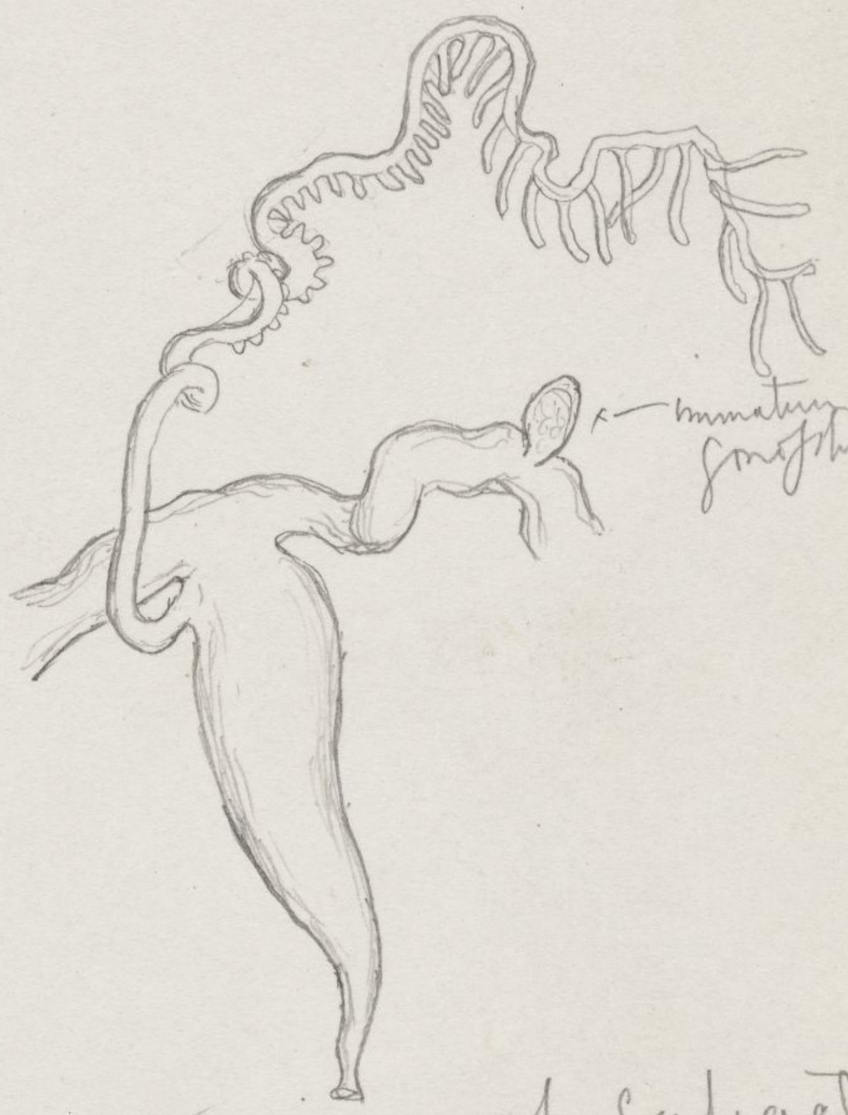
Bottles 339 & 354. & 369?

Nectophyes, Wyville?? ?

Float is from rather larger specimen in 339 - animal, 354



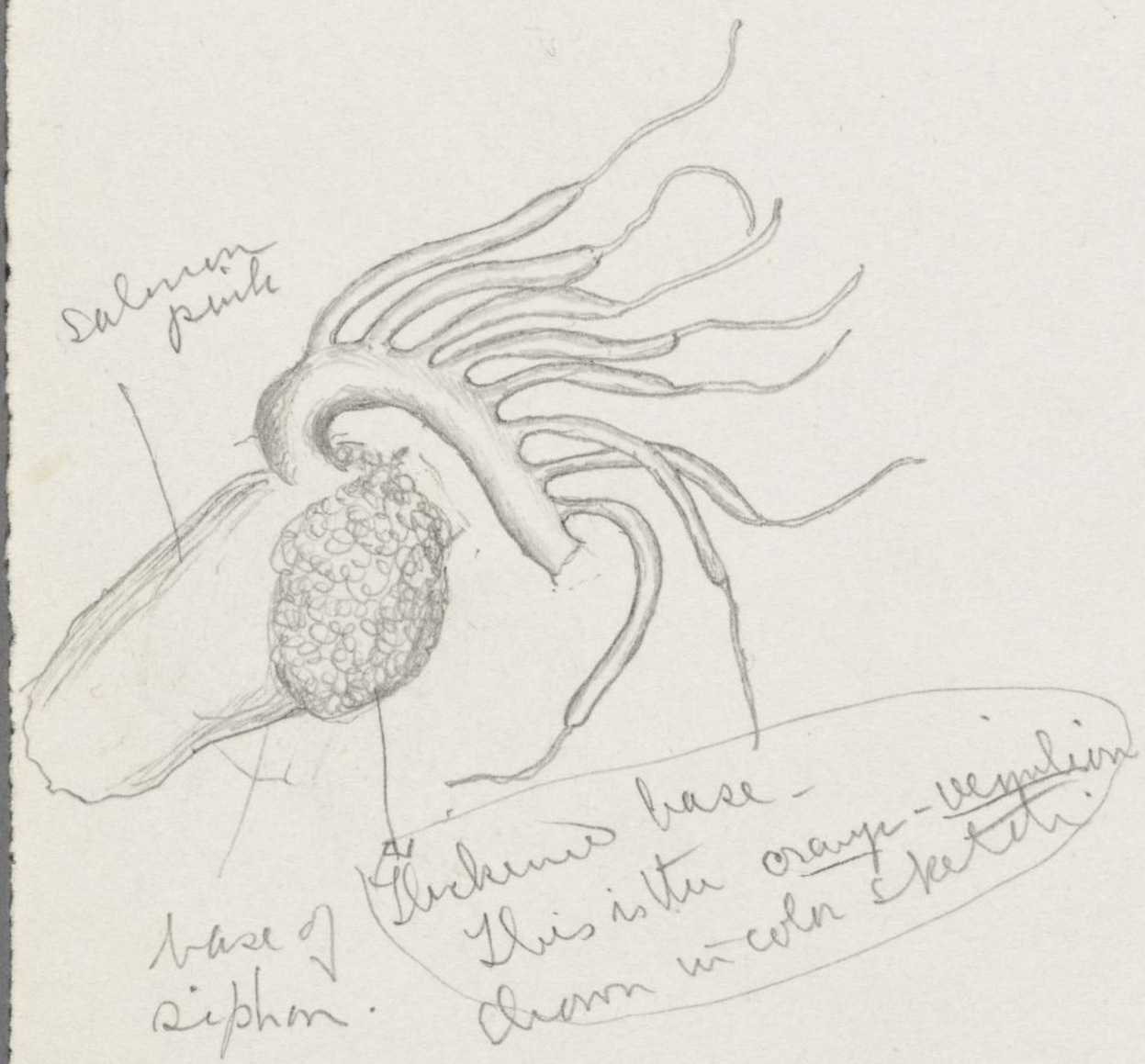
is much contracted com, apparently same spec; in bottle 369 has gonodactes thus, in internode & float thus

Whole animal except float was a pale pink (violet) like Pink Pelagia.
Extended 15 inches -
Nodosite is Nectophyes.

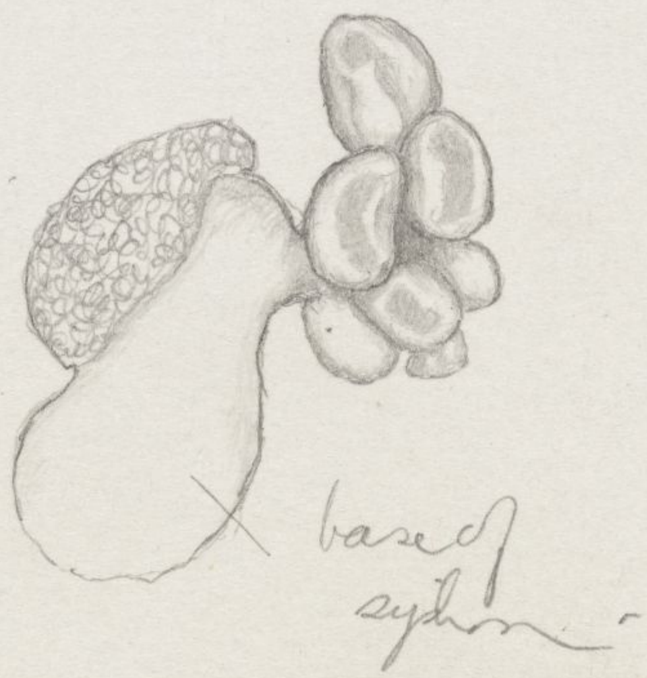
Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

This is the large ~~Siphonophore~~ bottle 421 # 4742.
Stephanomia with bright orange
siphons of which I have made
a colr sketch.

Tentacle & Tentilla - these were nearly all lost off
in the other specimen.
On this spc. only one small
fragment of a tentacle
still attached to the
siphon, retains its
branches - Tentilla
end each in a single
simple filament.
Tentacle & Tentilla
Salmon pink.



"Rear" view of same
showing cluster of
gyrophores -



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Bottle 188. 4661 - Nov 15

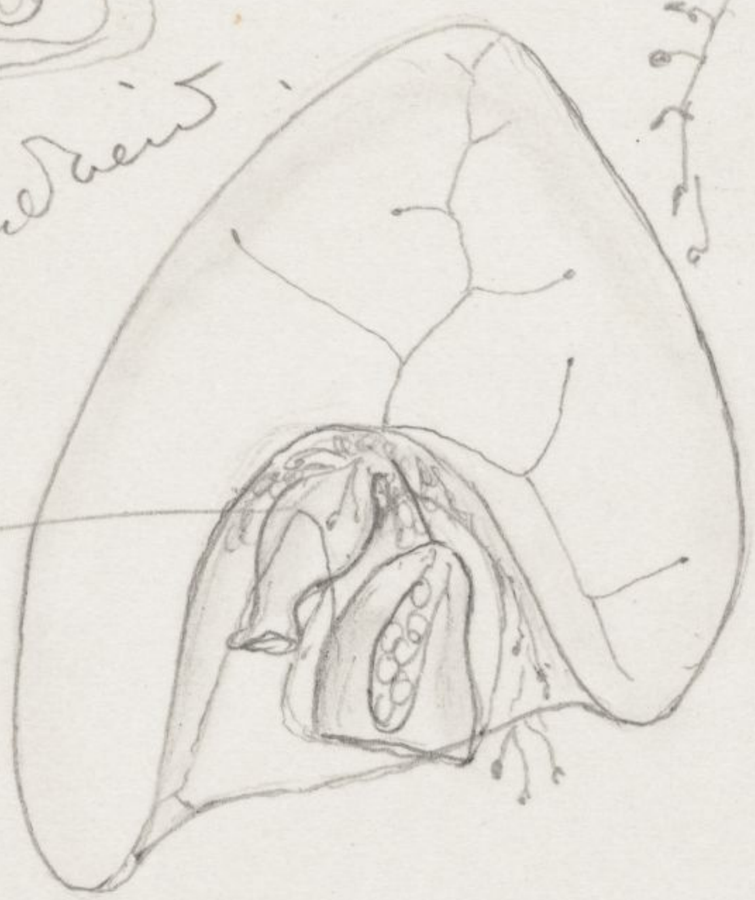
Endoxella

Monogastric -

Siphone alone.

Endoxella

Enlarged 1/4. There are 2 spc. both Excellently preserved. See also the other sketch of this same spc. Canals in the two spc. very greatly. This is Haeckel's genus Endoxella - but much larger than any yet described. No cyst, stem & parent corm, only short branches on the unlade



Brownish yellow / intactes / milky.

Bottle 208

I nat height.

The Hydroecium of formed by the central grooves & bells of spin at each end - Evidently Praya & very much like the spc. bottle 30, already sketched from coasts lower California - Blue corm is pale yellow, otherwise colorless - corm very much contracted & further broken or immature

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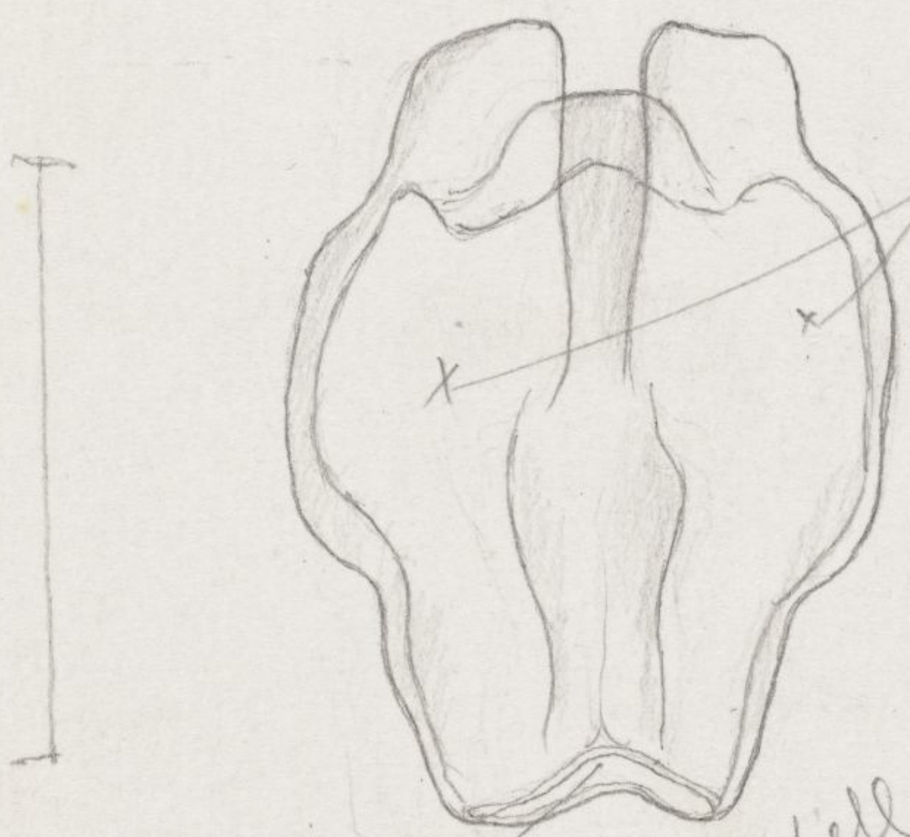
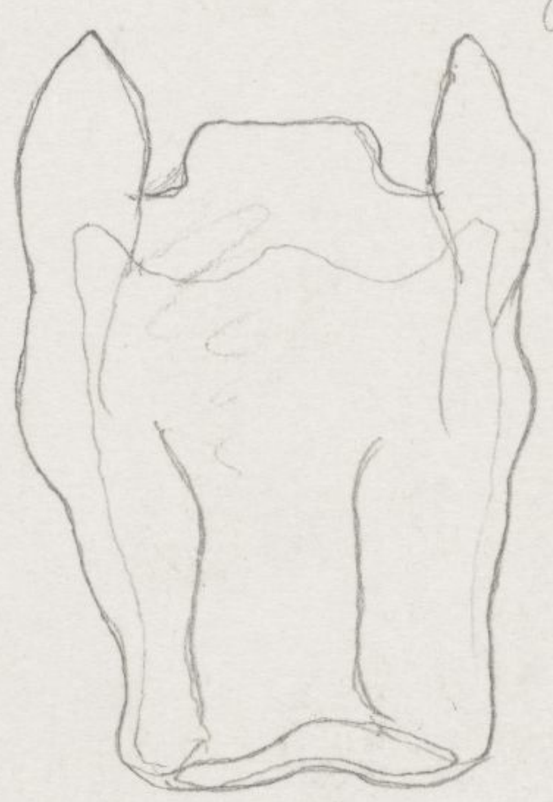
#4715 — Apolemidae —

in Naval pm 1740 fms.

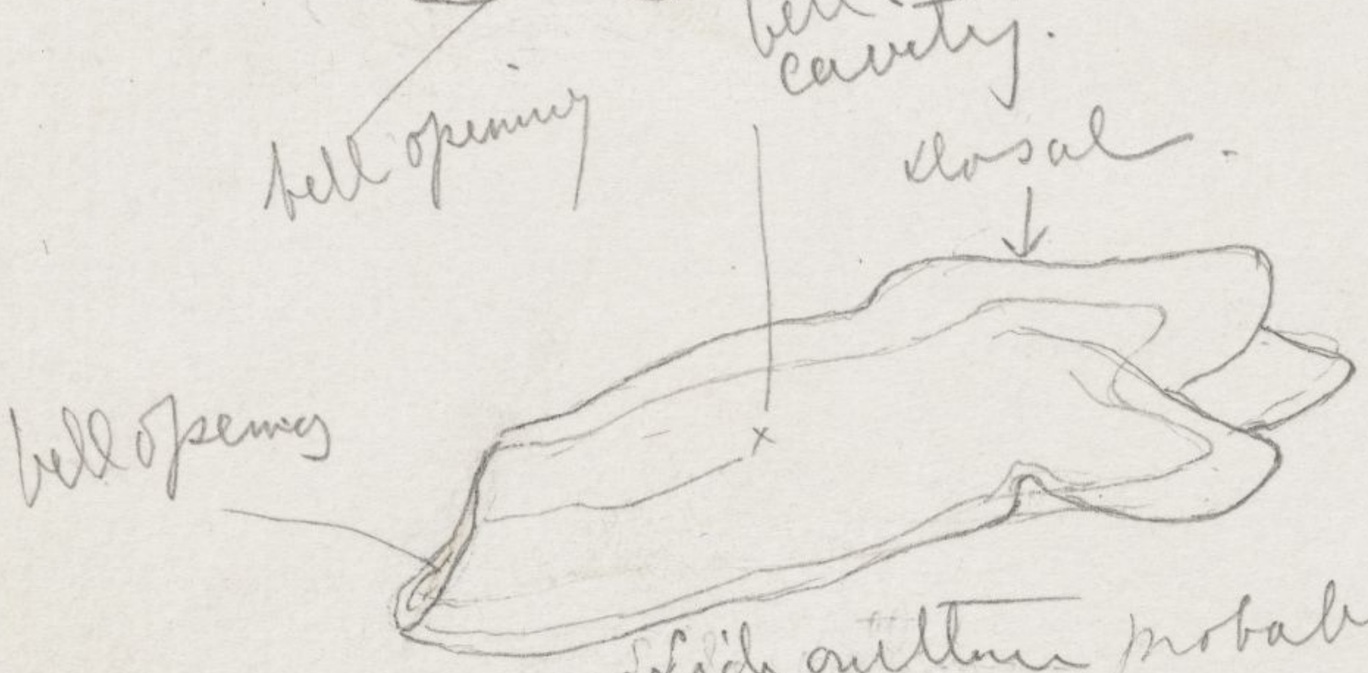
~~Cuvier~~ Nectopteris o heads 5 agalmid with

always skeleton from this station.



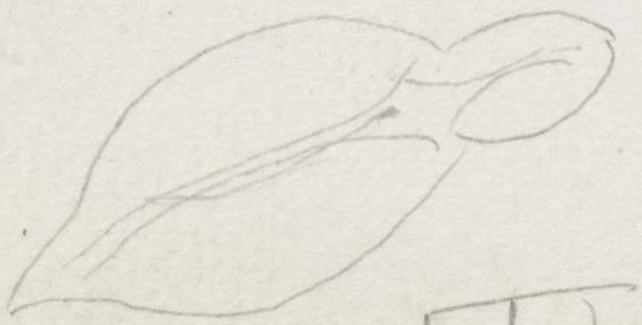


in another form distorted?



Bell walls as thin sacs who formed as a simple pneumatophore Haeckel. Apolemidae

Such outlines probably considerably flattened.



bract constricted

side outlines of same.

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44.

Bottle No. 208.

Seen from one side colorless, exc. Tentacles canary yellow

outlines from one side - 2 bells

in good condition & preserved - Salem? See Haeckel.

outlines from one edge, showing relations of the two bells.

Praya.

~~Nectophores~~

Haeckel.

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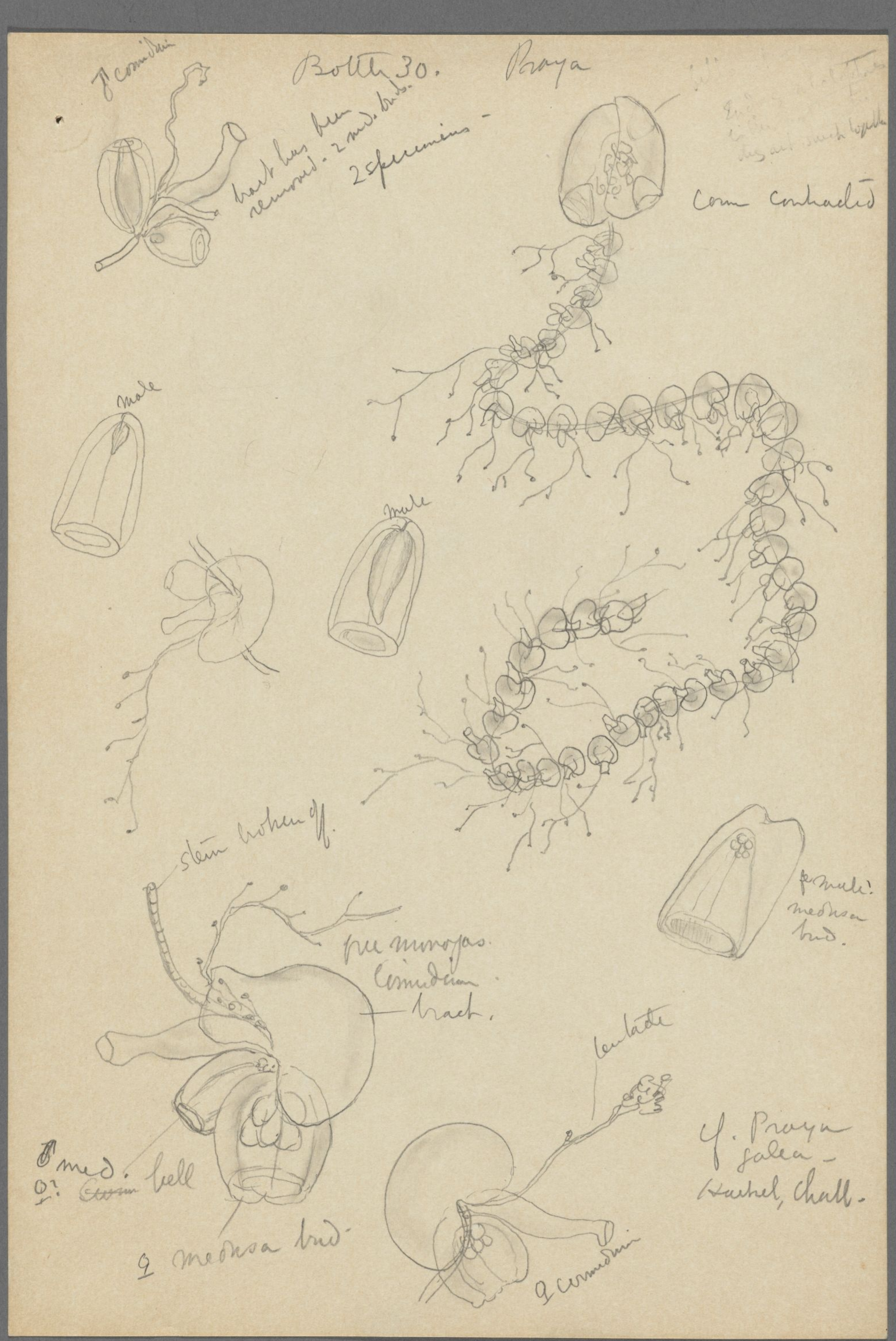
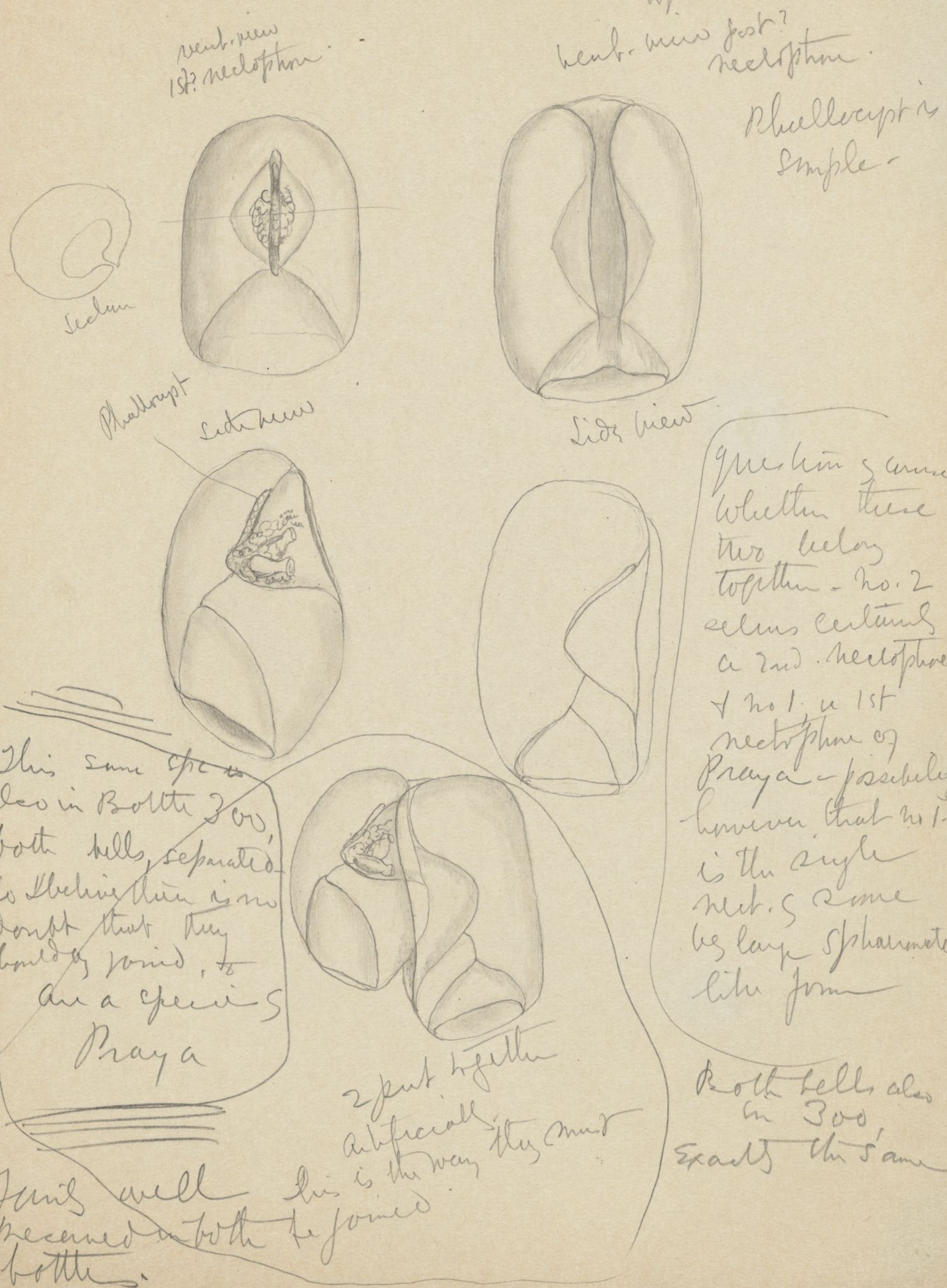


Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Bottle 292 - 4689 - 300 Lat. Dec 12 -

also 300

2 nectophores separated, but came up together in net.



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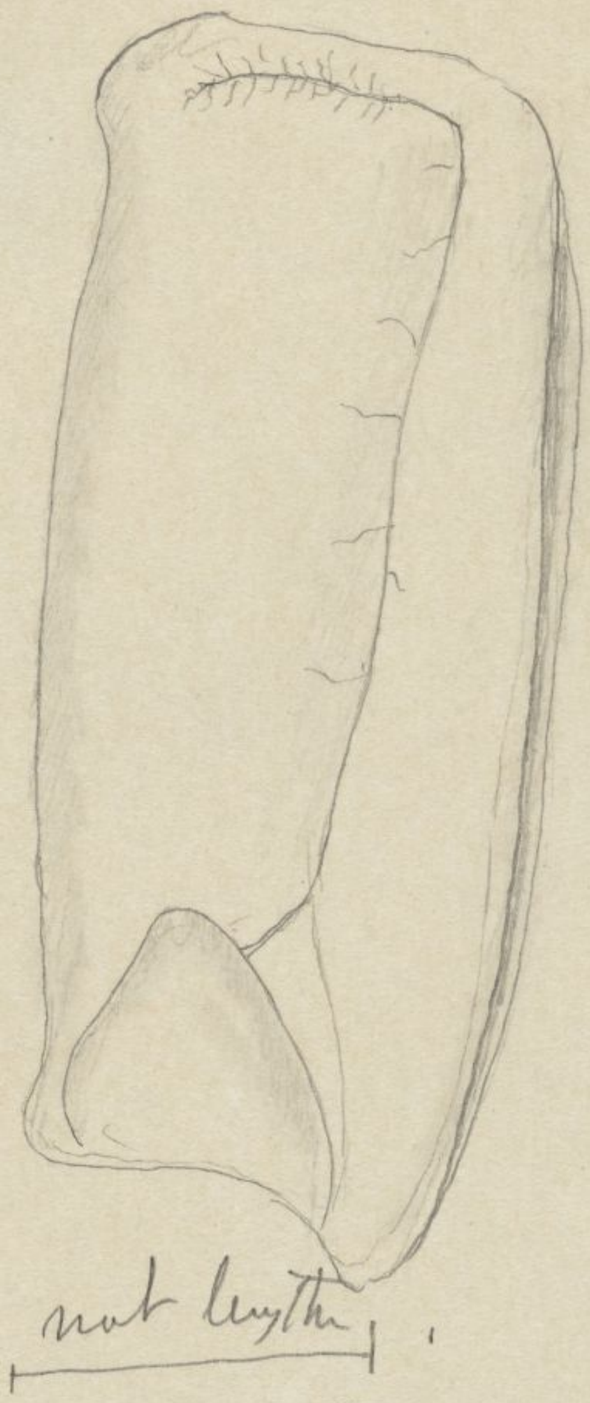
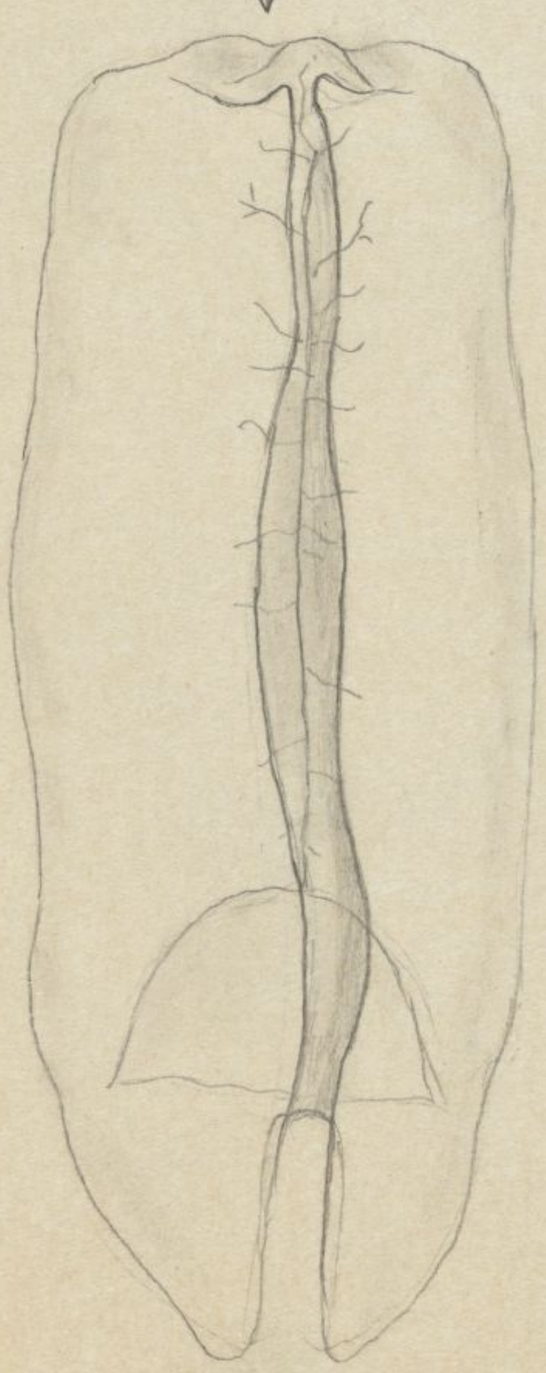
Bottle 266.

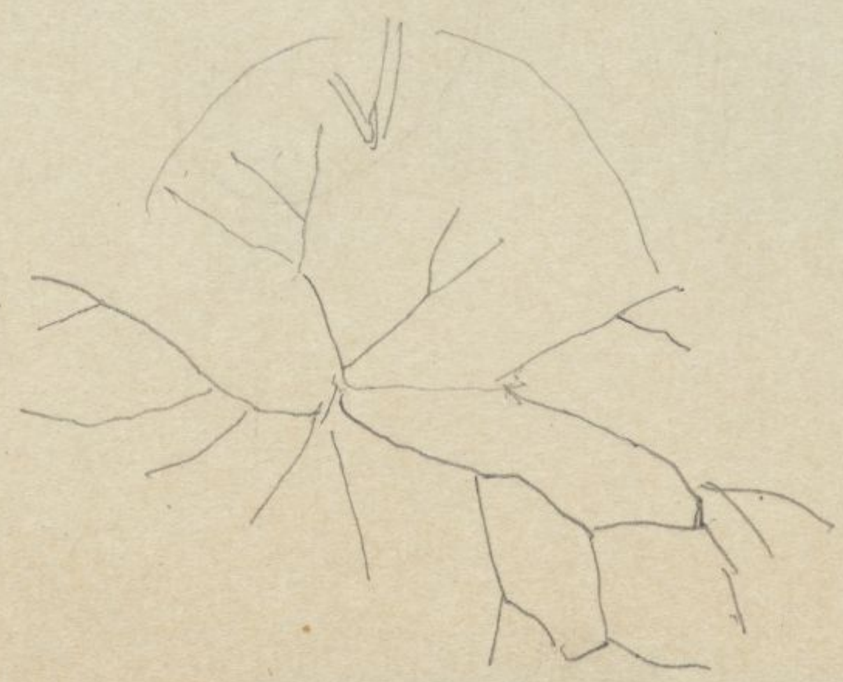
2 nectophores & a bract — well preserved colorless corm entirely disappeared





are bracts — there are 4 or 5 in the bottle

attachment of dem still remains.



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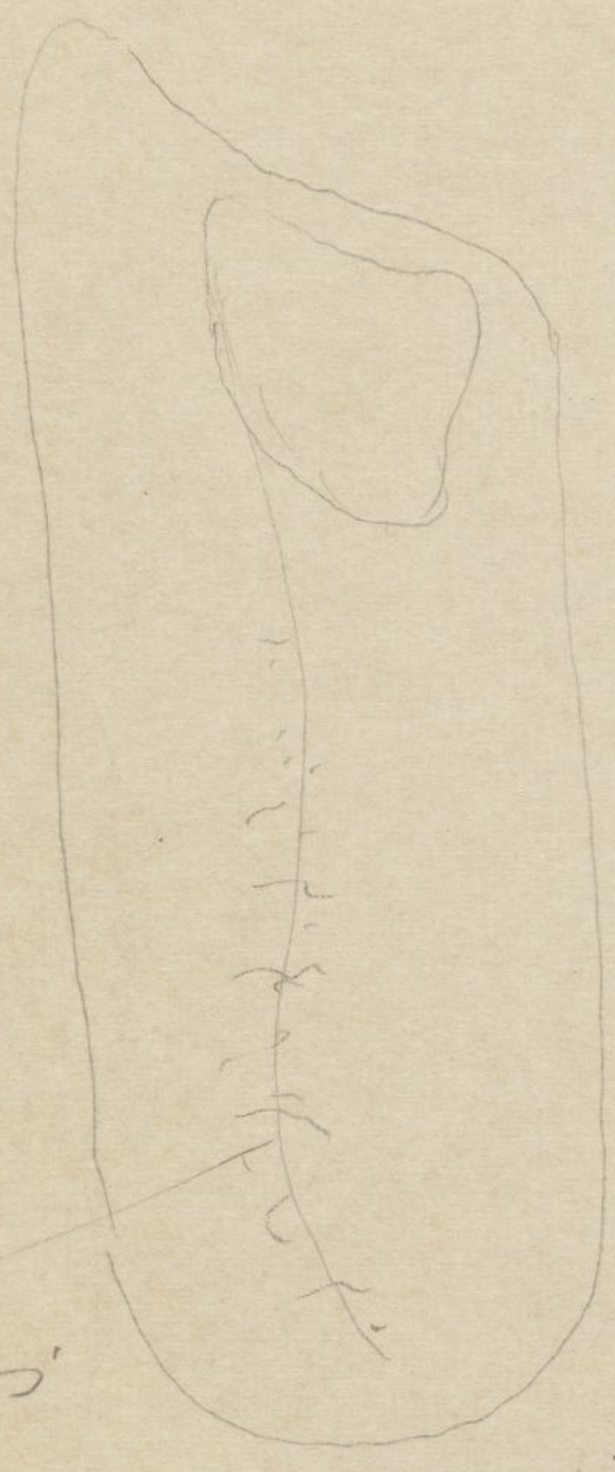
Praya

Bottle 266 –

note –

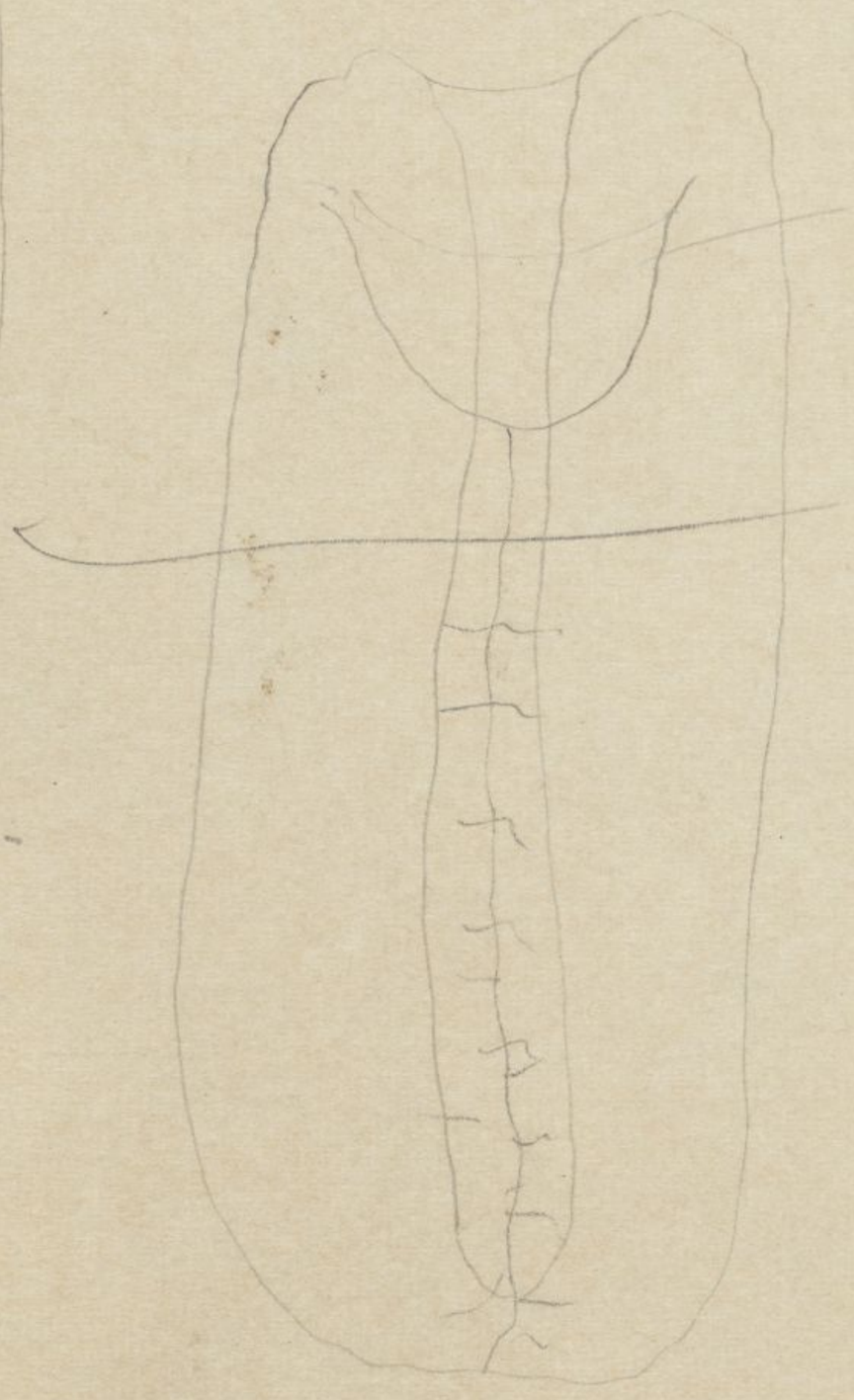
section



side outlines

"hood"

Canals



are the Diphyadae.
related to Praya – see
the fig. attached,
Chall –
These 2 bells belong
together, but comes
last.

outline from the front.

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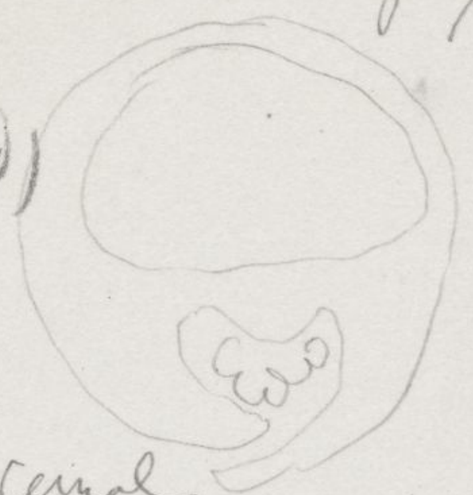
Bottle 752

Same sp. as in 266 (sketched) where there are both bells.

Praya?

Section of bell bell



canals.

nat length.

Hydrocoeal canal is open at both ends.

only one bell - ~~who~~ with coenosarc attached.

is it a single Praya bell, or an enormous monophyes?

In good condition - well preserved

Coenosarc lemon yellow

tentacles milky -

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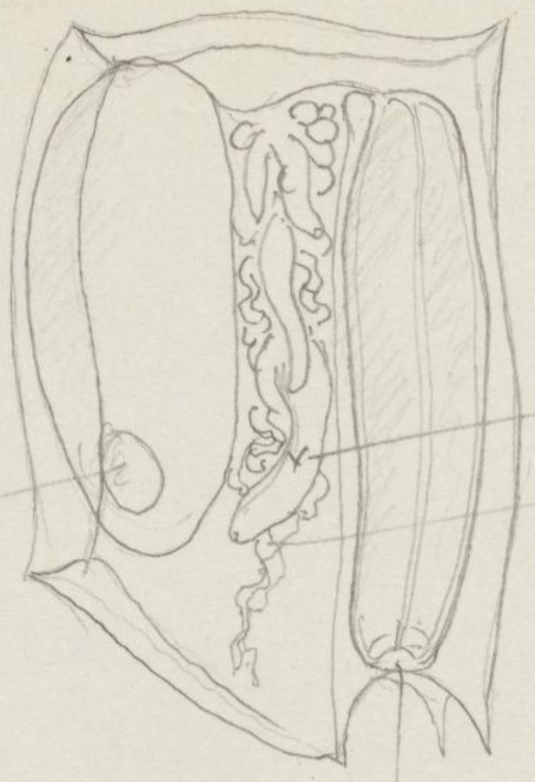
36 Bottle No. 189.

outline from the side.
colorless.

monogast. generation.
? genus ??



nat size.

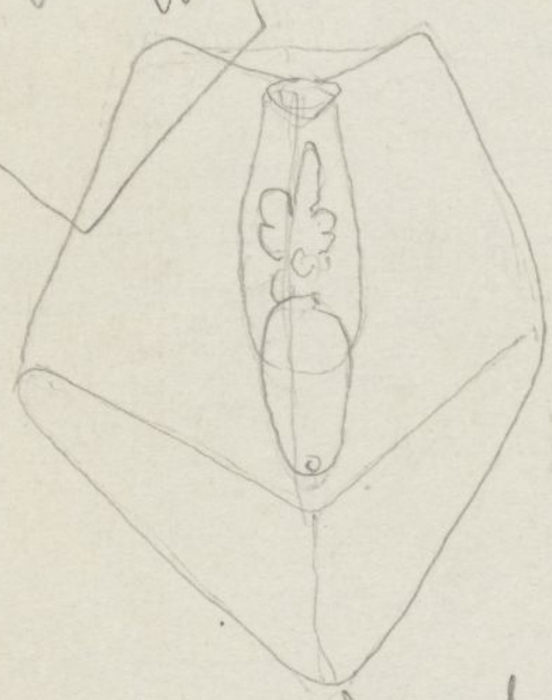
stomach
Tentacles.

air bubble.

Sperg's swimming bell.

Bottle No. 189.

Inner edge this ingrowth



nat. size

Outline ? dorsal aspect - colorless - no opaque edges at angles.
Entirely Transparent
Es. from float.

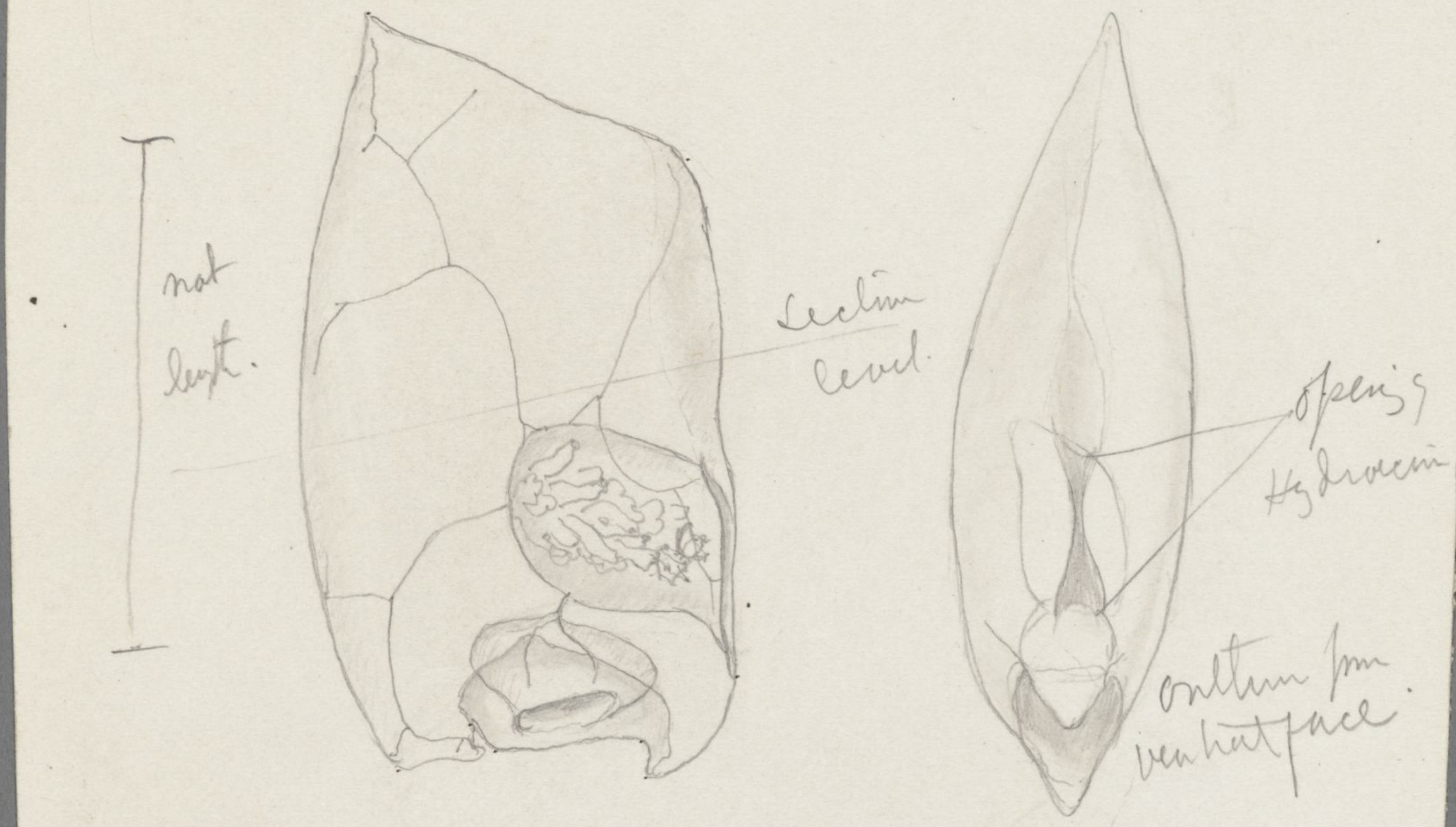
side view.

nat. size.

See Bottle 248 for 3 specimens in good condition.

Jm 143 -

Lens ??
Com pale yellowish - Otherwise colorless



ventral face

Section at level marked above

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Bottle 327 - 464704 -

Galeolaria - 2

bells still formed -

Canus Canals shows

well but margin

of bell opening on

long must be

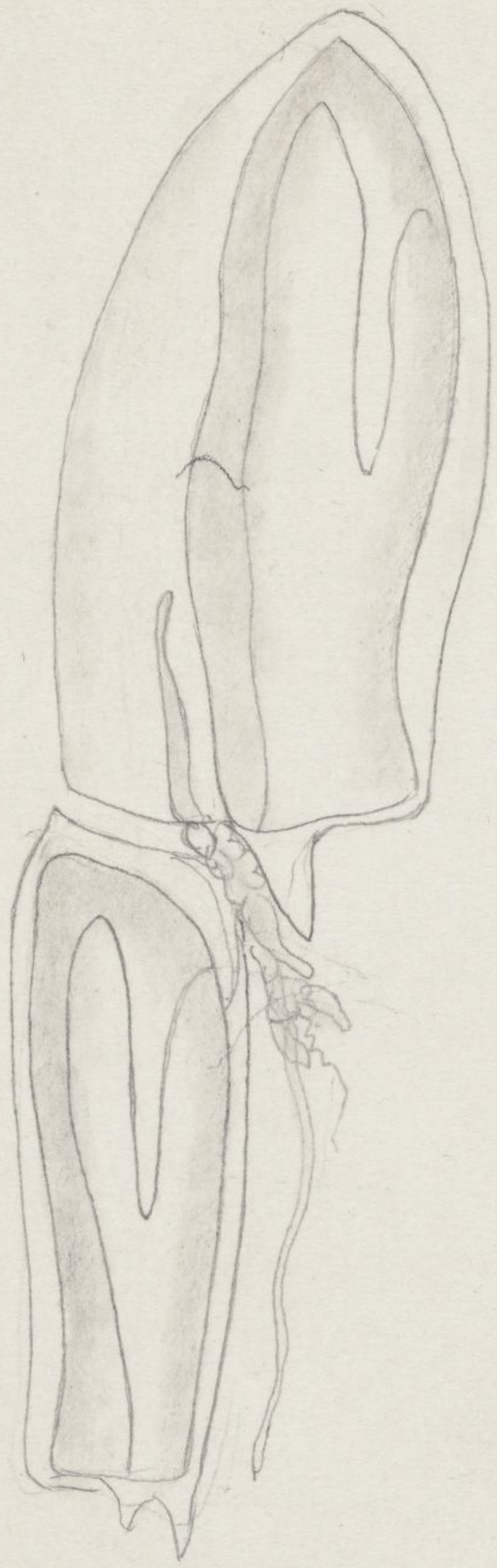
drawn from other

specimens -

Ant = "constricted"

Post = "oblong" } bells

Fairly well preserved



Galeolaria Sp. 4

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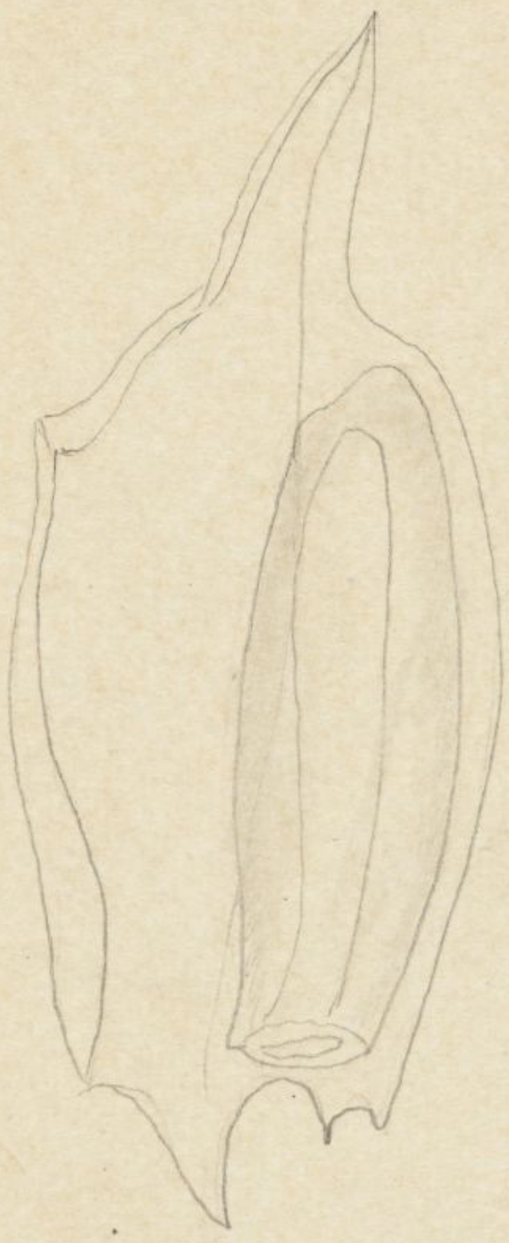
57.

Bottle 14 –
2nd. bell of Diphyopsis Campanulifera –

Ant. bell is in bottle 21 – 3 spec.
one is ~~some~~ in this bottle –
no doubt of identity of this because
it fits another.



nat length.

Also Bottle 15.

one spec. of this
in Bottle 19 –

nat length

Diphyopsis
swim-bell of
opaque &
white in Danalia
This spec is
not in Mayer or
Haeckel –

unas spc ??
Bottle 19 –
an spc.

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Acapulco March

The cormidia are
ordinate not scattered loose.
The stem is very extensible,
its swing is alternately expanded
& contracted
Stem between cormus bears many
"lasters"
Each of the rows of nectophores
consists of seven large & 10 or 12
gas bells.

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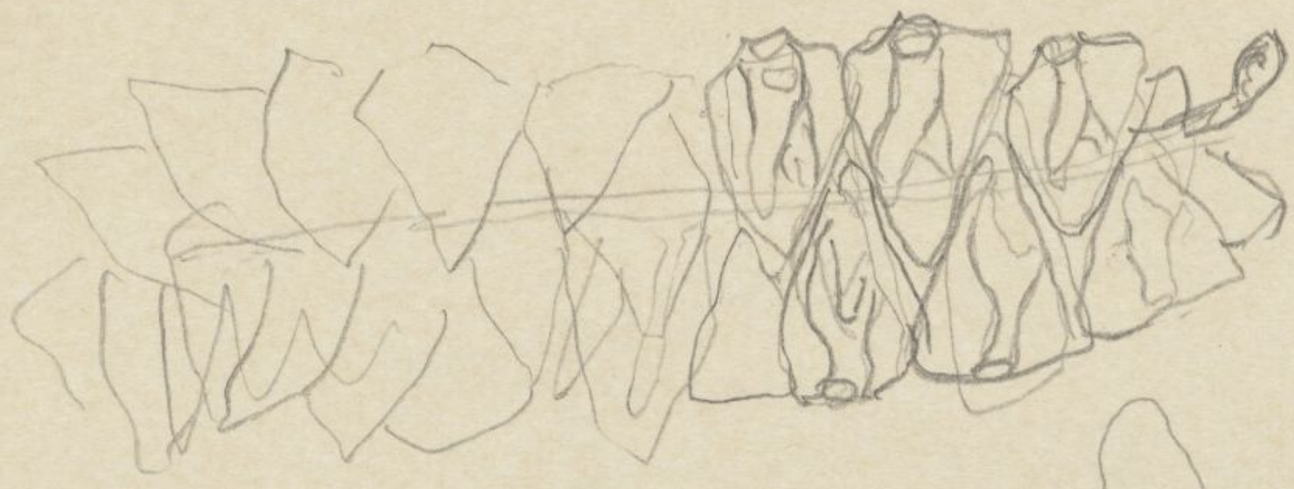
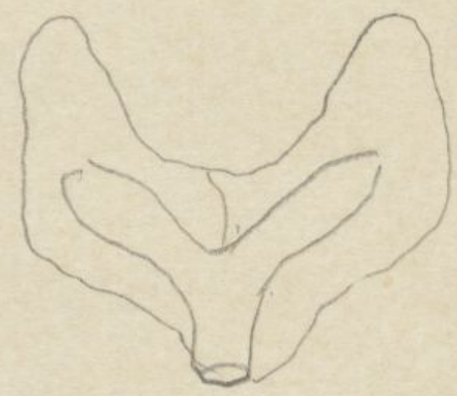
Bottle 84 — spec. Crystallodes;
Same spec as already sketched)

nat length.



— Float



this half as already sketched

side view of one nectophore.

nectophores arranged on opp. sides (dorsal & ventral), the stem, & alternating as in Haeckel's Crystallodes when from Ceylon — Float is detached, 5 nectophores in each row.

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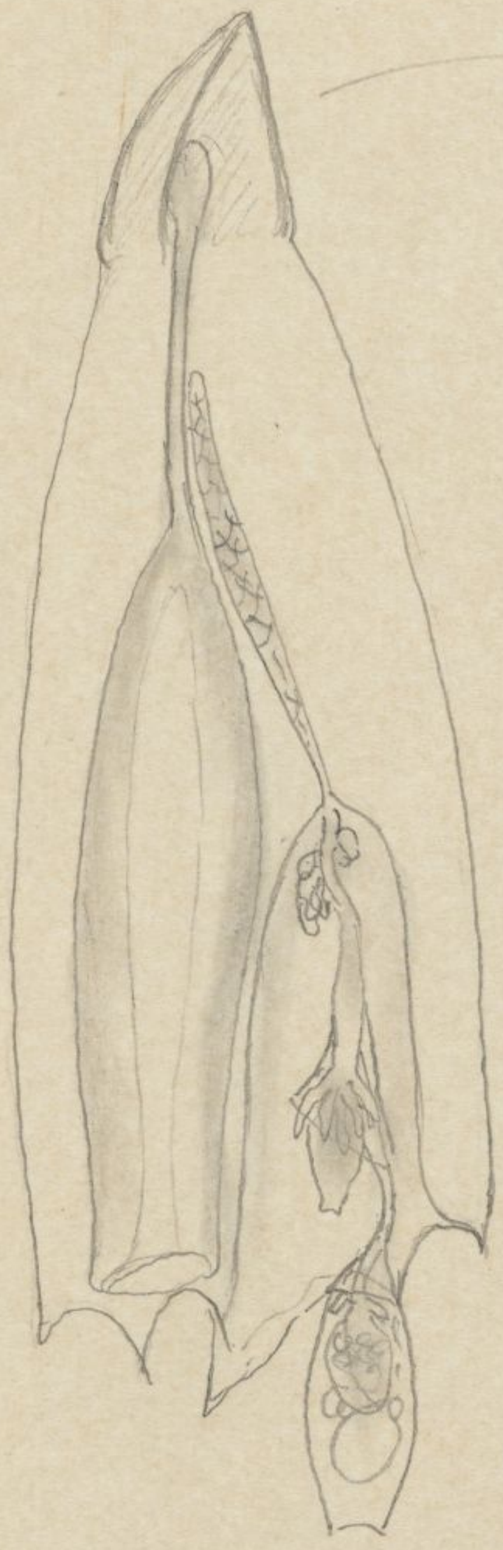
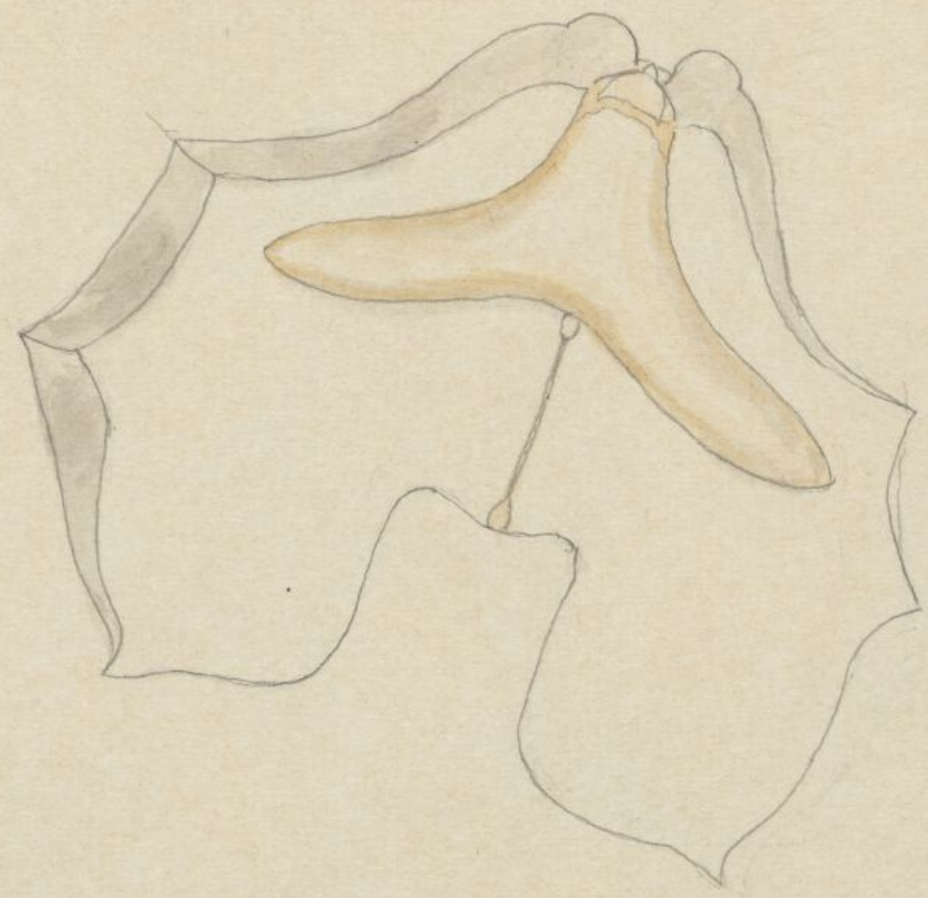
Bottle 17 - 4588 - surface
Oct. 12.



peculiar chunk: 5 apex 5 bell-
pentagon inches section - 5 fin
opaque ridges.
In this bottle may spec. 5
this species also of D
campanulifera & aequilla

[nat size.



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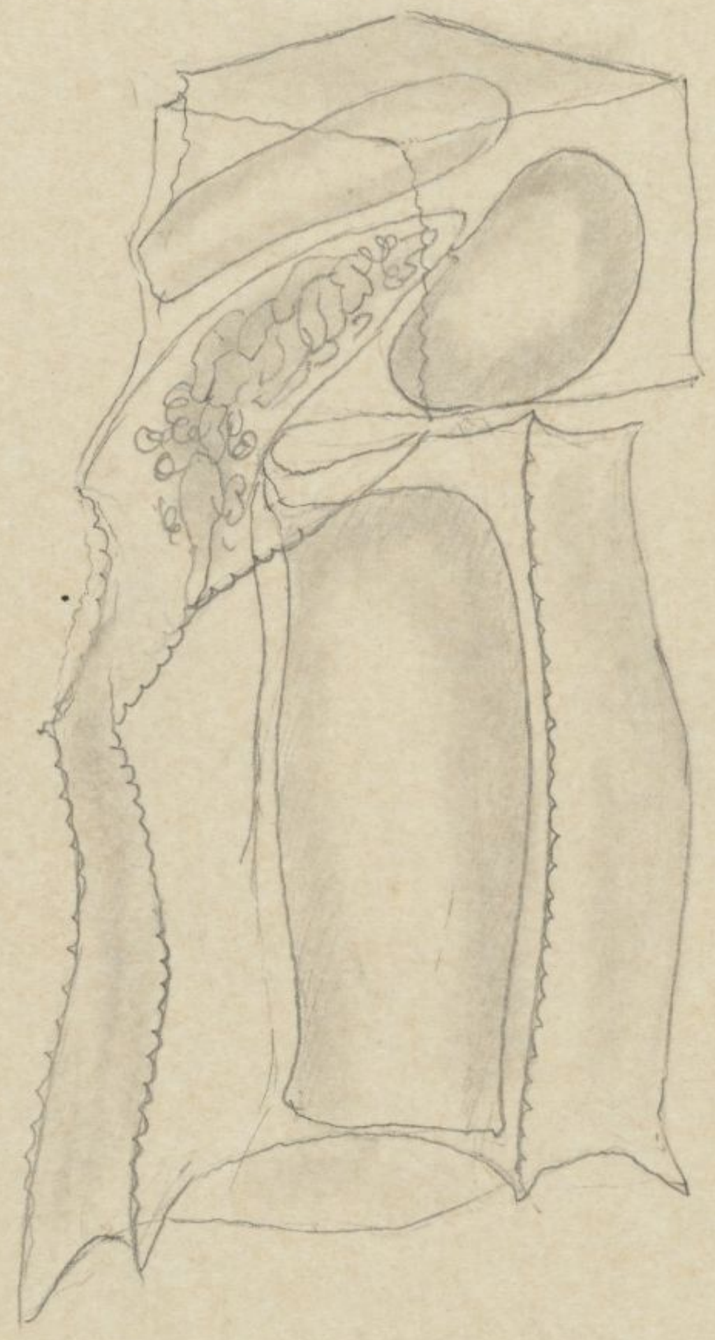
Bottle 3/6

Bassia

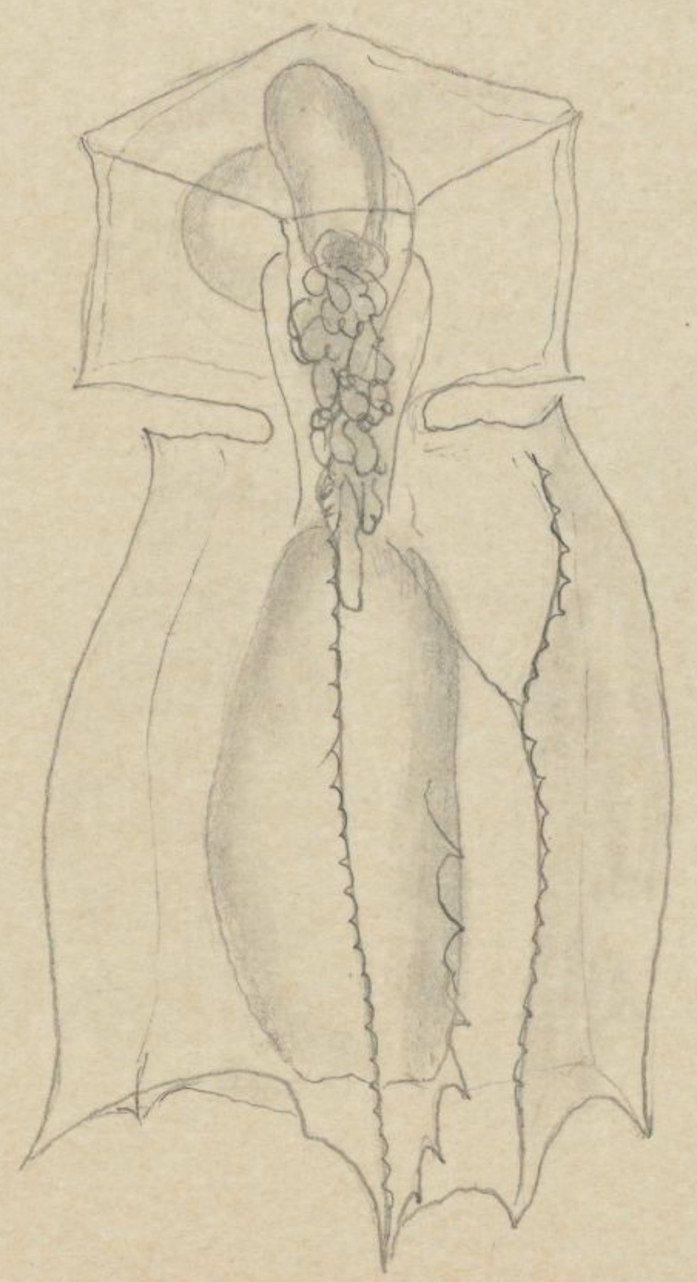
From one side

From other side

Spontline



I nat length



Dorsal view

cf. Bassia obeliscus from the Atlantic

Cerianis in Bartel Chiall.

Tabulum quadrum Huxley in Leg. of Hoge Phys. Pac.

& Abylen Quadrum probably all same spec.

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27

Bottle no 181

Probably Bassia -

see Haeckel, Chall.

- Bassia - ~~profunda~~ -
Canaries - of similar
structure -

x 5.

seen from the side -

Many specimens, well
preserved, but in most
the 2 bells are separated -
Entirely colorless -
Ex. serrated margins on
black ground appear opaque
white -

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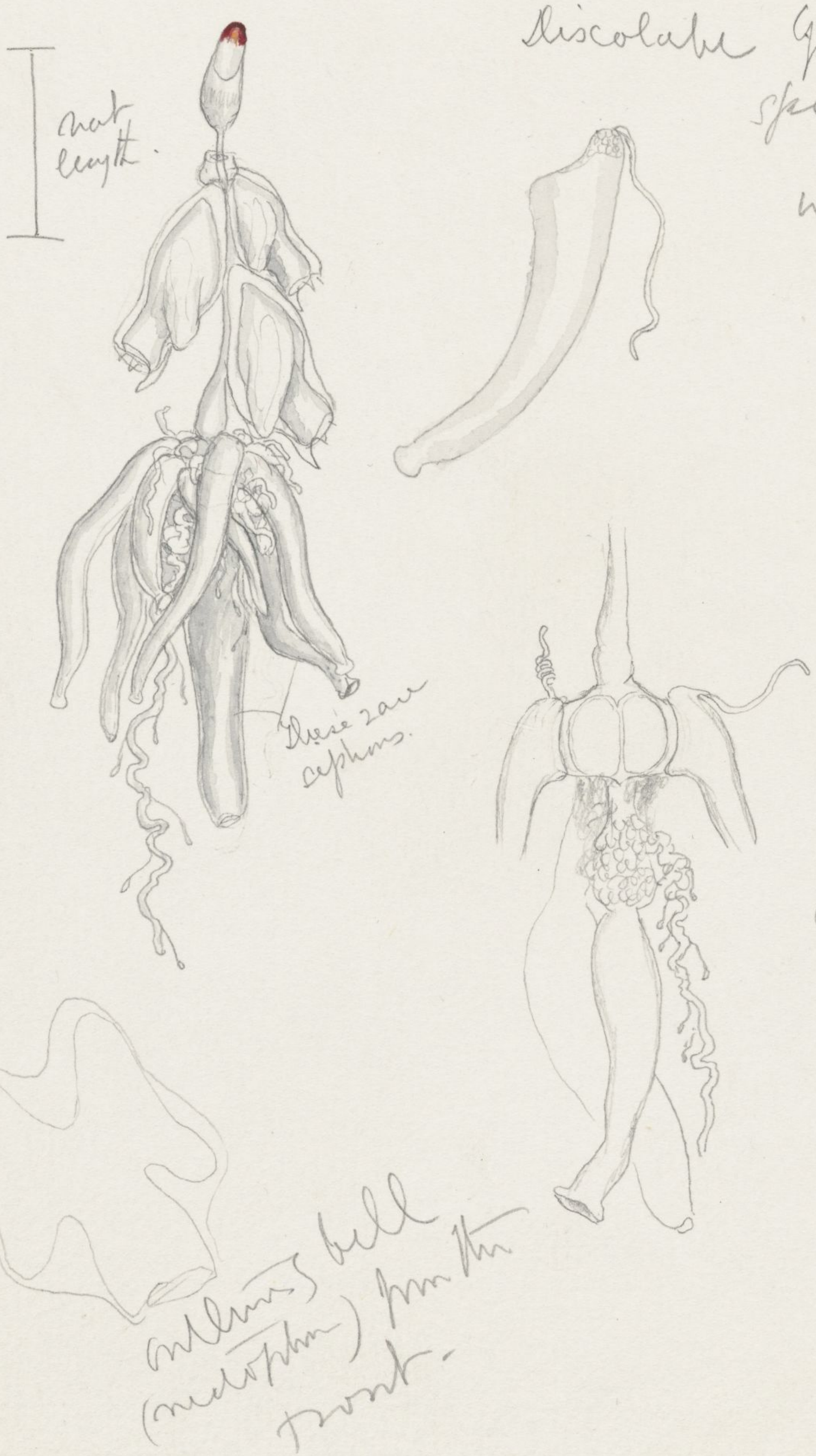
Bottle no. 338
4708 - Dec. 29 - 300 below surface
Discolabe Gymg
spec. already sketched in colors -



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Tentilla bright brick red - Otherwise colorless

Enlarged more than the other

Dorsal

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26 Ersaea

I see many other bottles.
Bottle No - 179.

outline from outside
X 4 -

See Huxley, chall. plate
probably the monogastric gen. of
some large form -

X 4
dorsal view

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Bottle

4705 - 300 Long.

Large cyphonum - of bracts on corm -

degrains showing arrangement

ventral aspect.

dorsal -

Fragments, 1 very large, the spec from the hand pill 7 bottle, 1 in pelmah, 1 in fleming, the rest in formol - first half with bell & float not taken.

2 ~~arrows~~ / 2000 S

bracts hang to alternate sides -

showing essentially the same pattern though bracts are less crowded & a diff shape.

for side aspect see other sketches.

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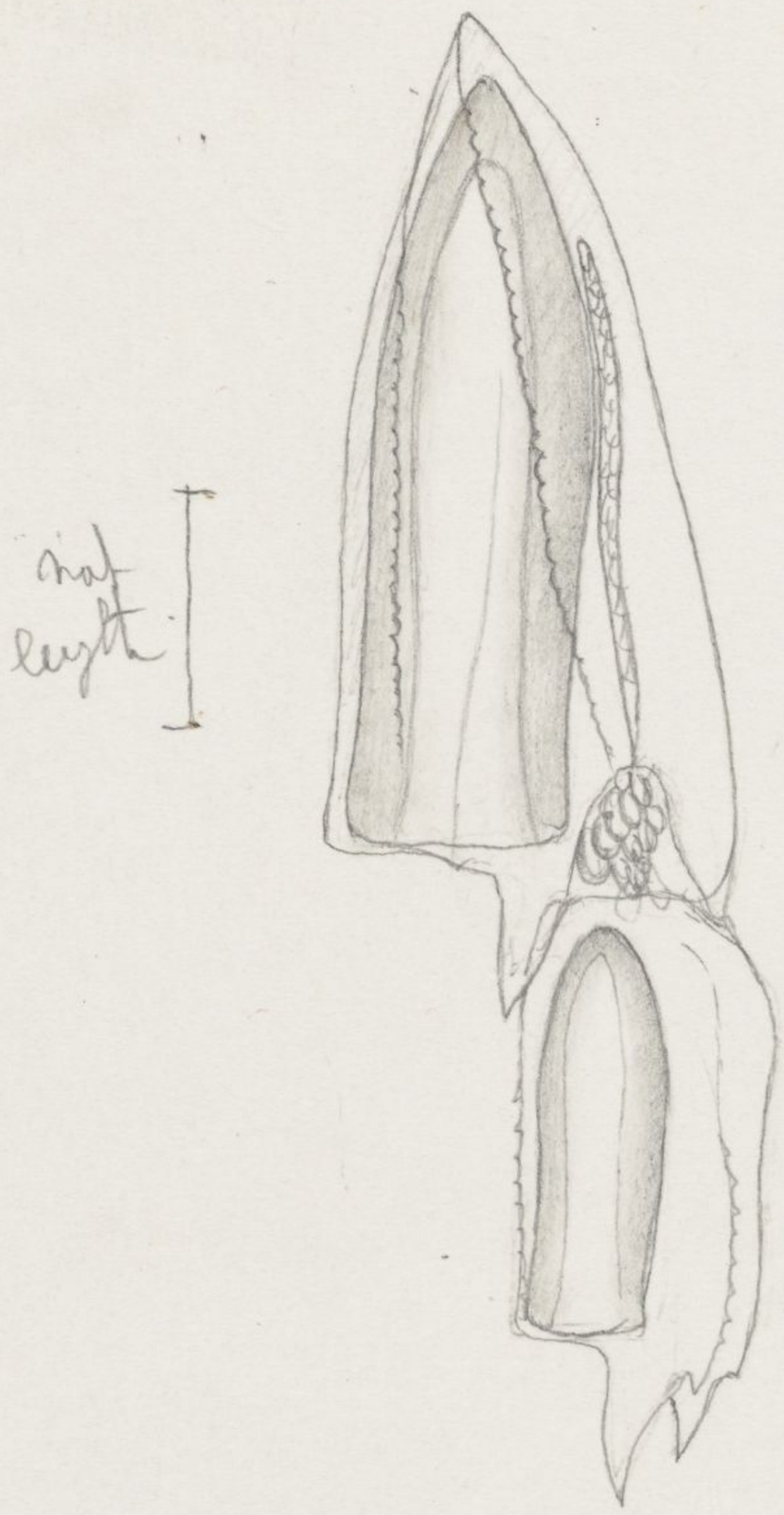
Bottle no. 346.
4710 - Surface.

The top canum antum -
The two bells are
connected - but canum is
strongly contracted
colorless -



Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Bottle 257

#4676 - 300 fathoms Surface Decay

nat size

~~Side~~ view front

side view

Insecta, spec.? 4 spec. in this bottle, all more or less twisted & flattened, & 2 or 3 loose bell no 1. Bell no. 1 - very flat & leaf like - very transparent -

This is very diff in shape of "float" & 1 bell from spec. sketched no 26, Bottle 179.

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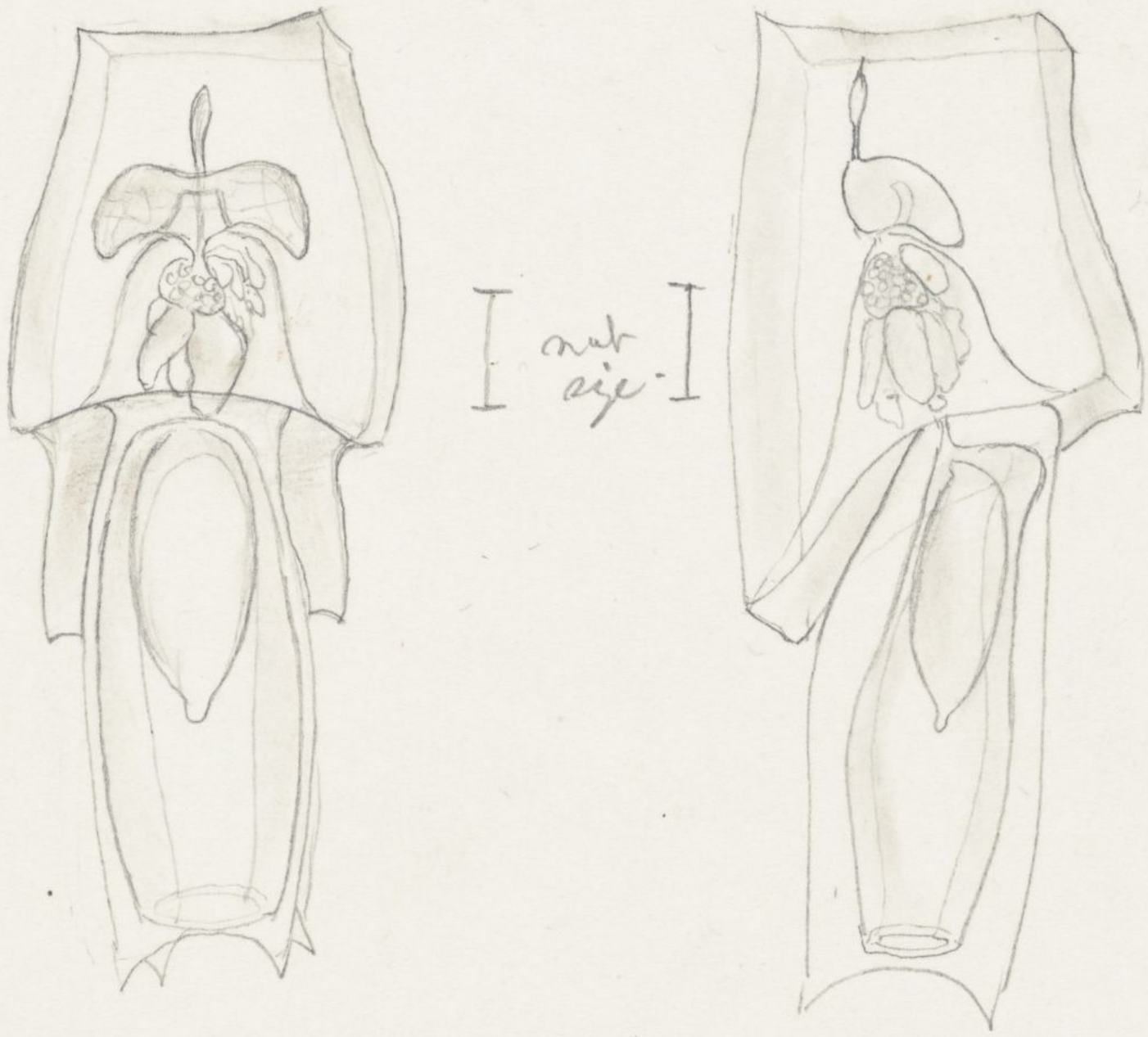
Bottle 259. aglaisma

Yms S Calpe see Haeckels plate



Front view side view.

2 complete specimens in this bottle.

transparent & colorless.

Monogastric gen - Ursaia ??

or Bassia ??

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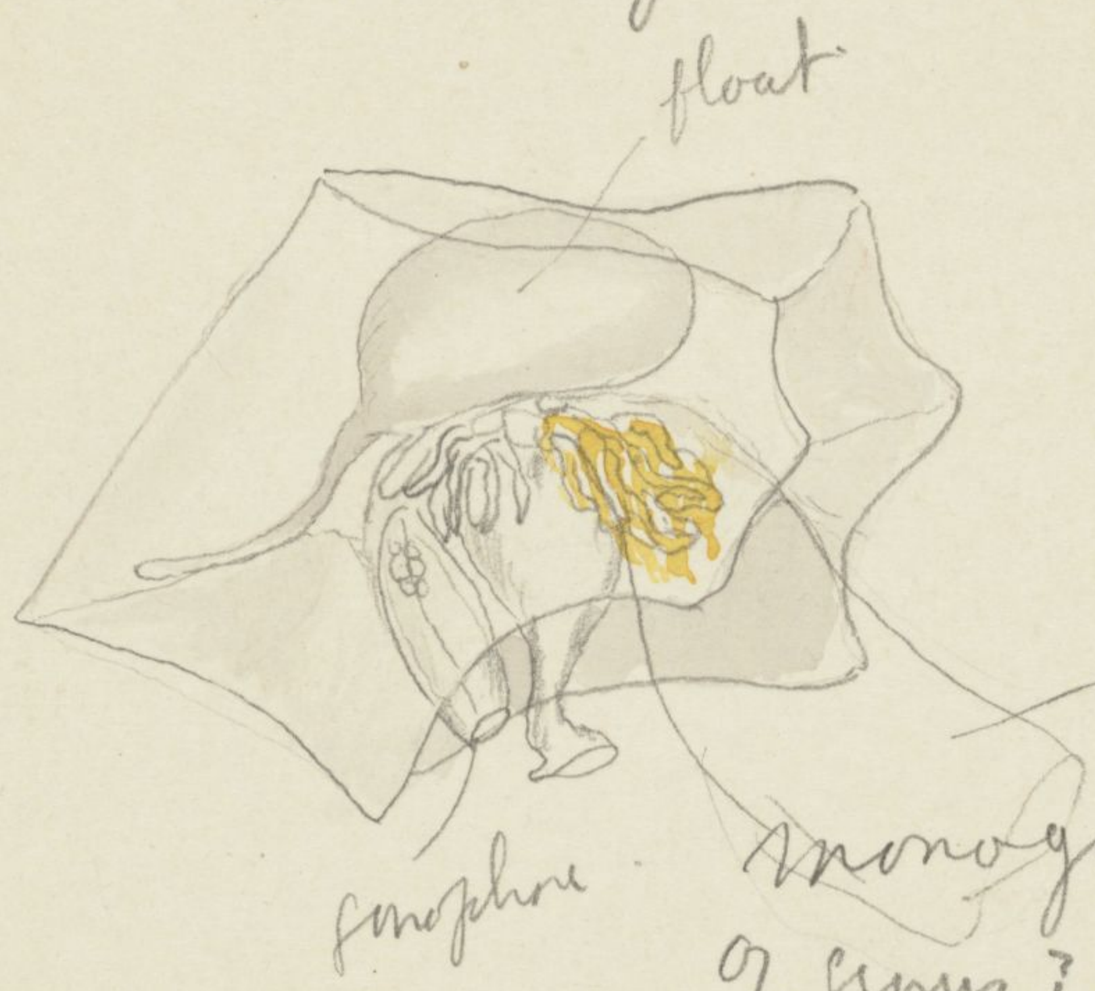
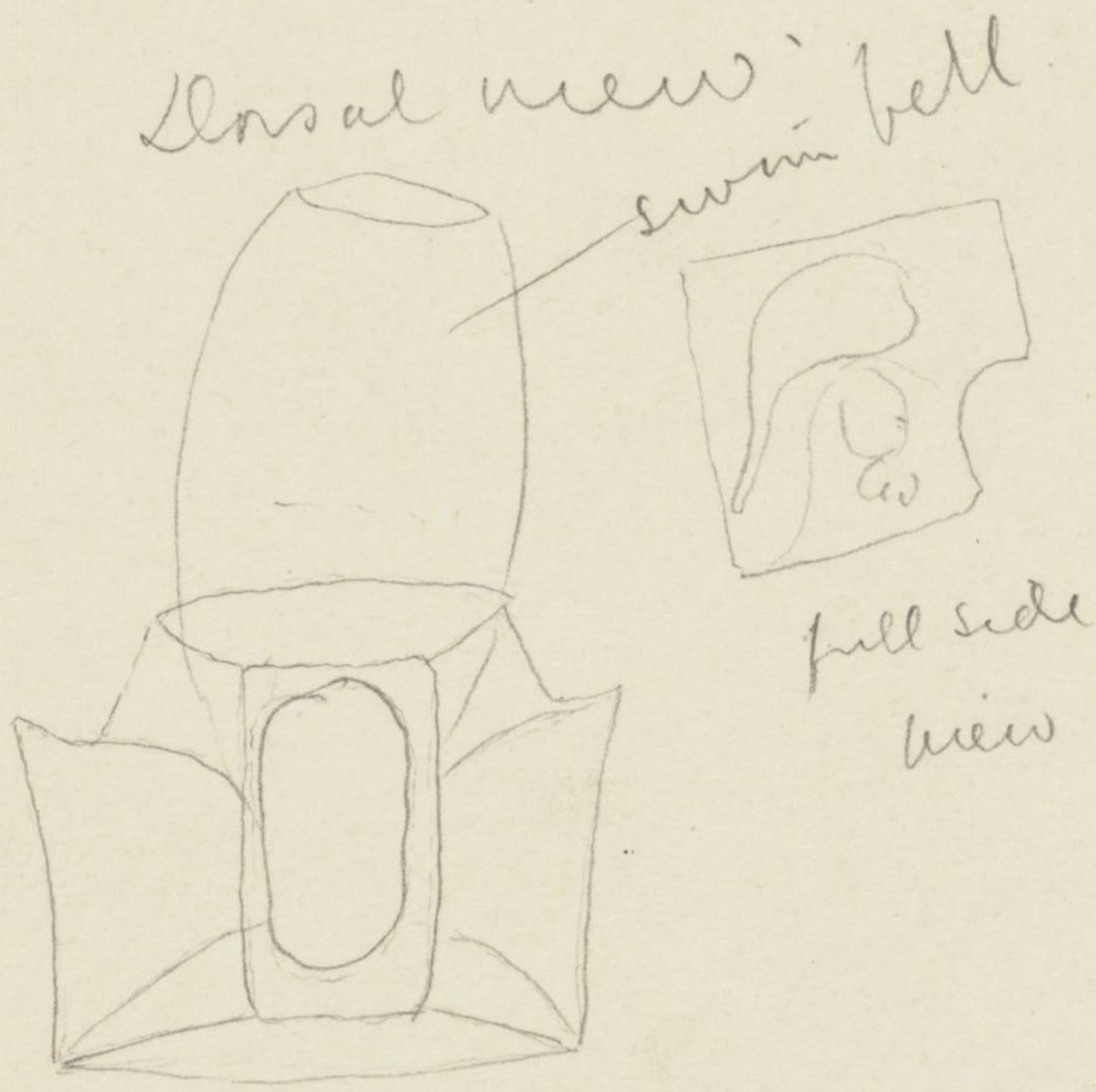
561.

Bottle No. 241 –
4671 – 300 fathoms surface
only one specimen – genus =





See also, for swim bell intact, Bottle 248, 2 specimens.

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56

Bottle 248 & 19.
Diphyopsis

8 specimens, & in other bottles
took none with second
bell attached.
Exceedingly long & slender.
species ???
no fig in Mayer &
Haeckel charts. Cite this.

oil glob.

Bottle 21 & 19.
& others about
the same date.

Diphyopsis
see 19.
Campanulopsis
Chun -
mayer
Polygas
not figured
S. Pacifica.

one cimedium

5 more

very large ones
in Bottle 15,
well extended

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Bottle 279 – # 4684, 300 ft Surface.

This bell was alone –
transparent –
Cum detached.

nat.
length.

nat length

faint pinkish –

Bottle 278 –
1 specimen –
seems like same as
big pointed Diphyopsis
taken commonly –

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#4715 on Trawl Jun 1743 fms. Agalmadae
about natural size.

Siphosome strongly contracted & hiding
drawn of the nectophores.

4 Nectophores formed on the
Trunk all broken off, &
13 additional bracts.
Tentacles seem to be branched
but nearly all the tentilla
have been torn off.

Also fine
#

6.18

x 3. side view of Corm - contracted
natural colors
of Tentacles -

x 2

Side view

x 2 -

Bottle 85 - crystallodes

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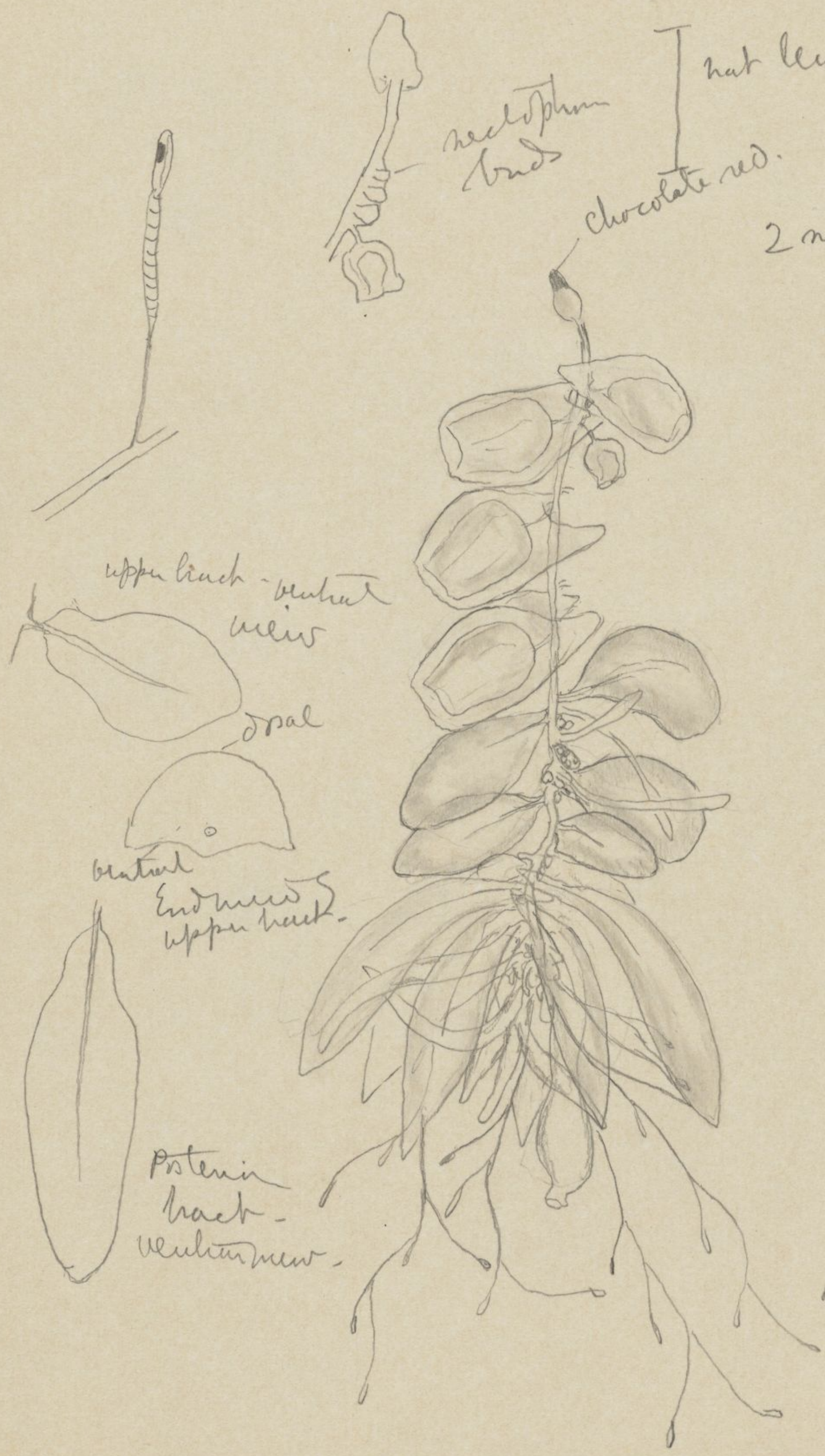
Bottle 69.

Camera sketch

nectalia? one cpa.



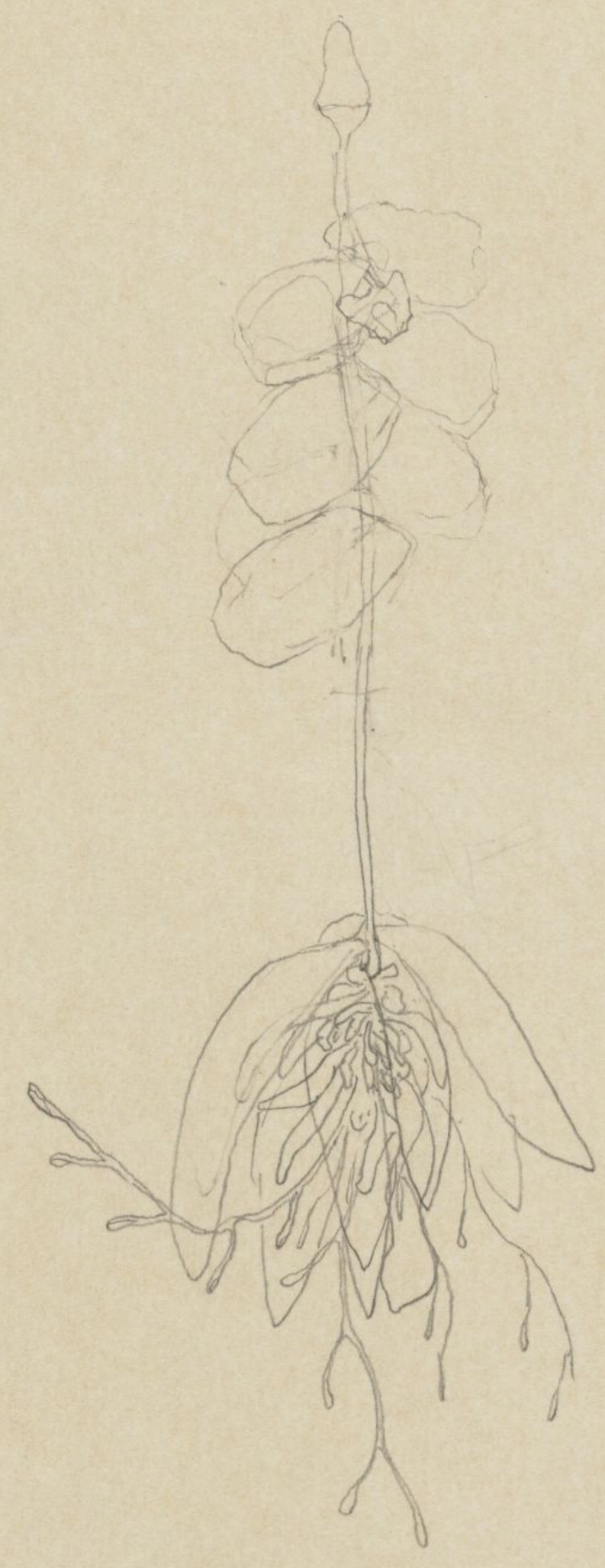
2 nectophores on right hand side lacking.

cf. agalma pontalesii which has adult bracts at end of scam on a two or large ones. This is same size as a. Pontalesii.

5 of these long bracts intact

The presence of 2 kinds of bracts, long & short - separates it from nectalia

Bottle 69.



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Bottle 255.
4676 - 300 fathoms.

Disiolabe

See Haeckel, chall.

Disiolabe quadrigata
wh. has 4 rows of
nectophores - then
only 2, on opp. sides
of stem com. This
is enlarged 1/2
& complete c
nectophores in
each row & 1
young one.

None in Mergen.
nor ag. a
Jewhes.
Haeckels spec.
was from Ind.
ocean (gelon.)
Matthews also a
N. Atlantic &
Mediterranean
spec.
Ologens
Claudebs Forskal

End view.

nectophores
float.
shows arrange. on
opp. sides of com.

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24

Bottle no. 176.

Abyla.

outlines as seen from the side.

monogastric generation ?
genus??
x8.

× — in some spc. this ~~bell~~ somewhat is minute the others it is larger than the parent bell.

dorsal view

x 8

Sexual generation

by numerous at 465 ϟ both at surface, + 300 fm to surface.

Colorless.

Ex. organs somewhat milky, + on black background anyplace margins of bell are dead white.

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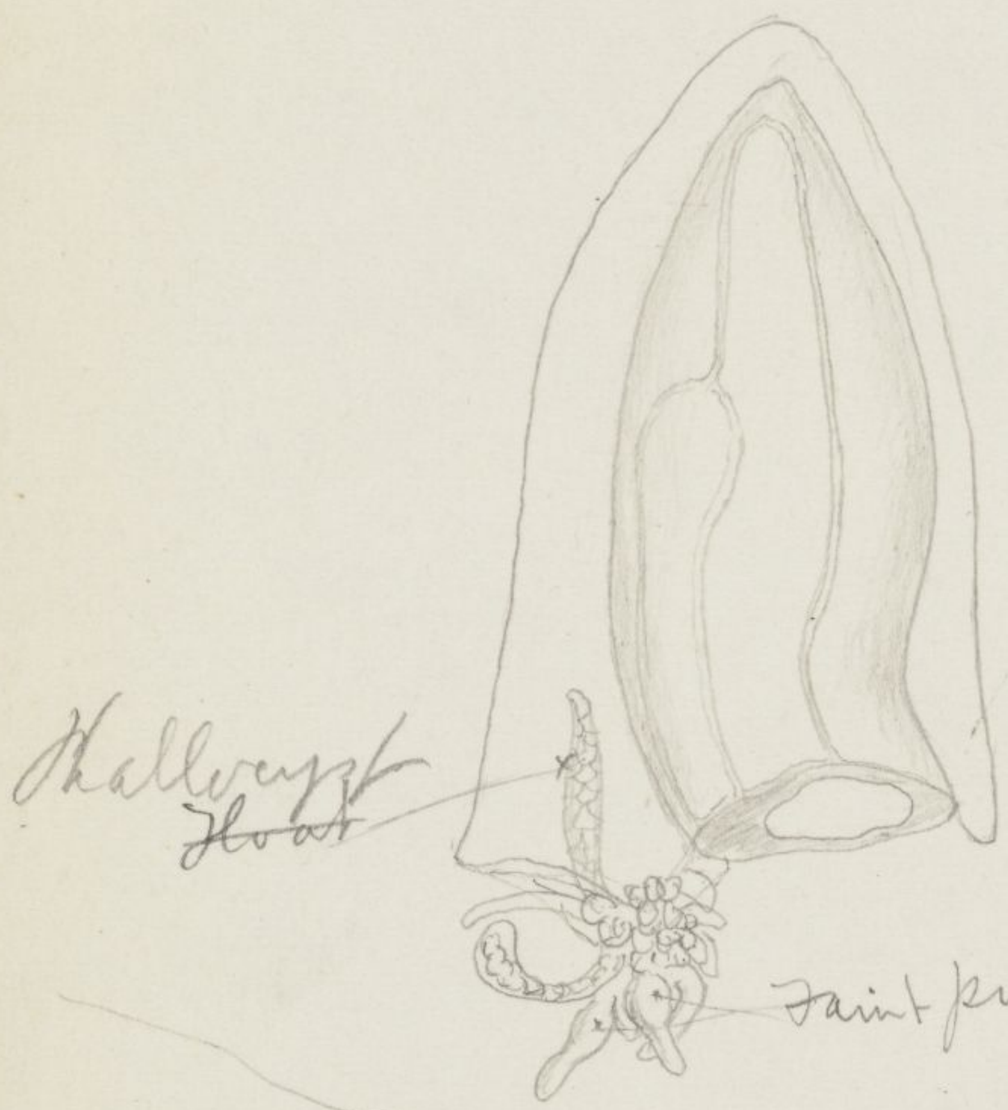
38

Bottle-191-

Galeolaria?

Probably only ½ of this siphonophore is here - Diphyidae?

many of these bells in the deep & compact bundle but this is the first Calycophore with ag of the palpons, siphons & c.



See Jewkes - Med. of Portugas or Irish Comm.

No Hydrocium

Bottle 173. 1 specimen - Contracted when taken

Sphaeronectes, Haeckel, see Mayer, Portugas. Plate 27.

153?

Look up Chun, 1892, Abhandl. Senck. Gesell. Bd. 18, p. 86.

Sphaeronectes Kölliker also Ag. & Mayer, Fiji.

Endo Phaycyst bends down towards edge of swimming bell. (Chun). Mayer (Fiji) says it doesn't.

Here tip of Phaycyst tips downward.

Bottle 324.

4903 - Dec. 27 - 300 fr Surface.

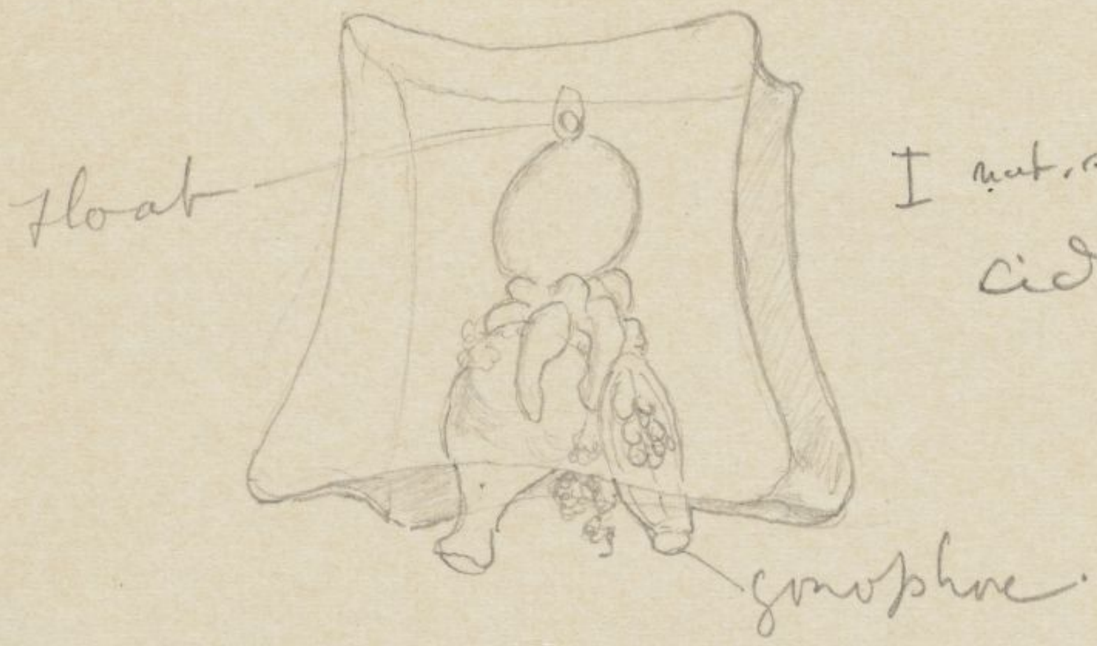
nat length.

very angular sided
exceedingly transparent
Cyan milky
Phalloids imperfect.
appears to be very long.

37

Bottle no. 189.

Agalmatina ?
See Mayer,
Tortugas Med.



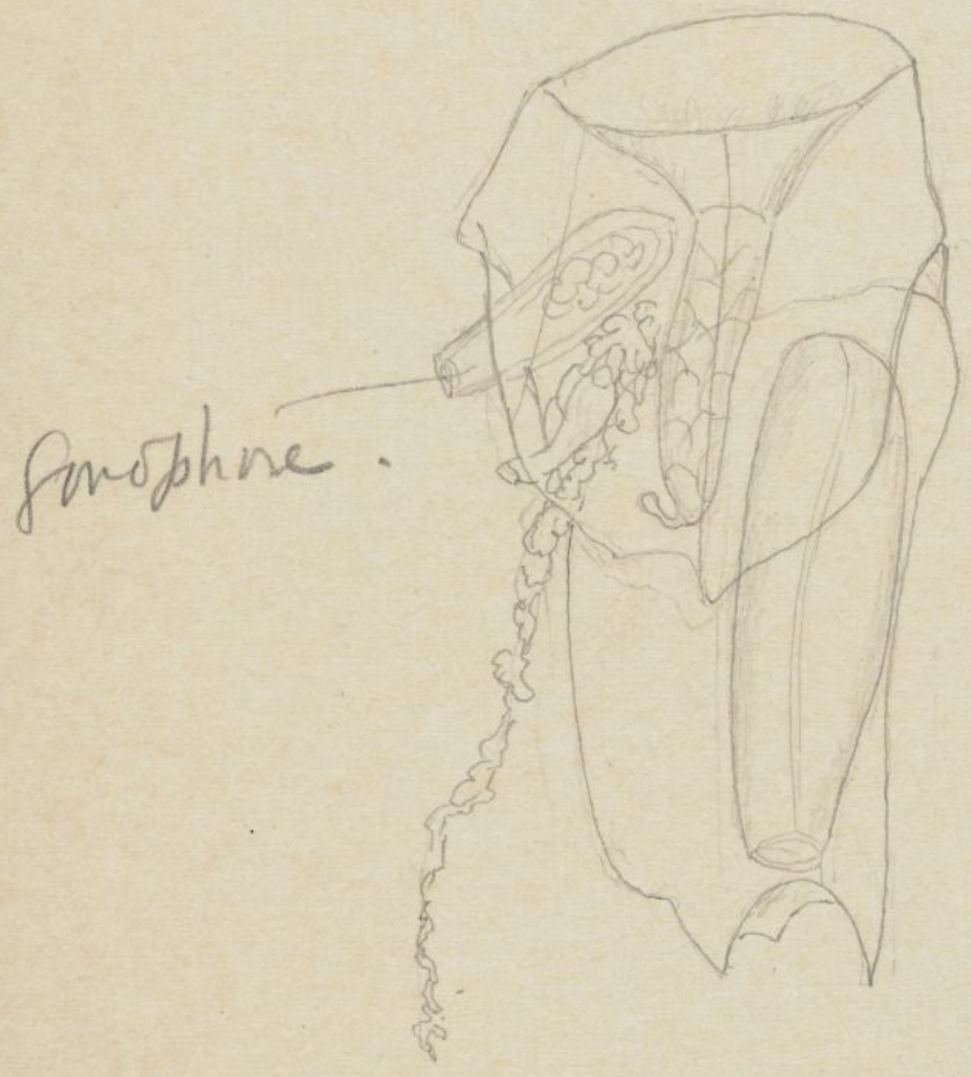
I nat. size.

Mayer figs

side view. Agalmatina cuboides

with large gonophore
acts as swimming bell.

Bottle 190.



I nat size

Entirely colorless & transparent.

Abylopsis ?
See the fig. of abyla
quincunx, Mayer,
Tortugas Med, Plate 34.
2 specimens -
One as fig. ~~the~~ (less tentacles)
the other with tentacles & c, but
no swimming bell.

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Bottle 273. #4680 - Surface

5 specimens from Tendelim

Sphaeronectes

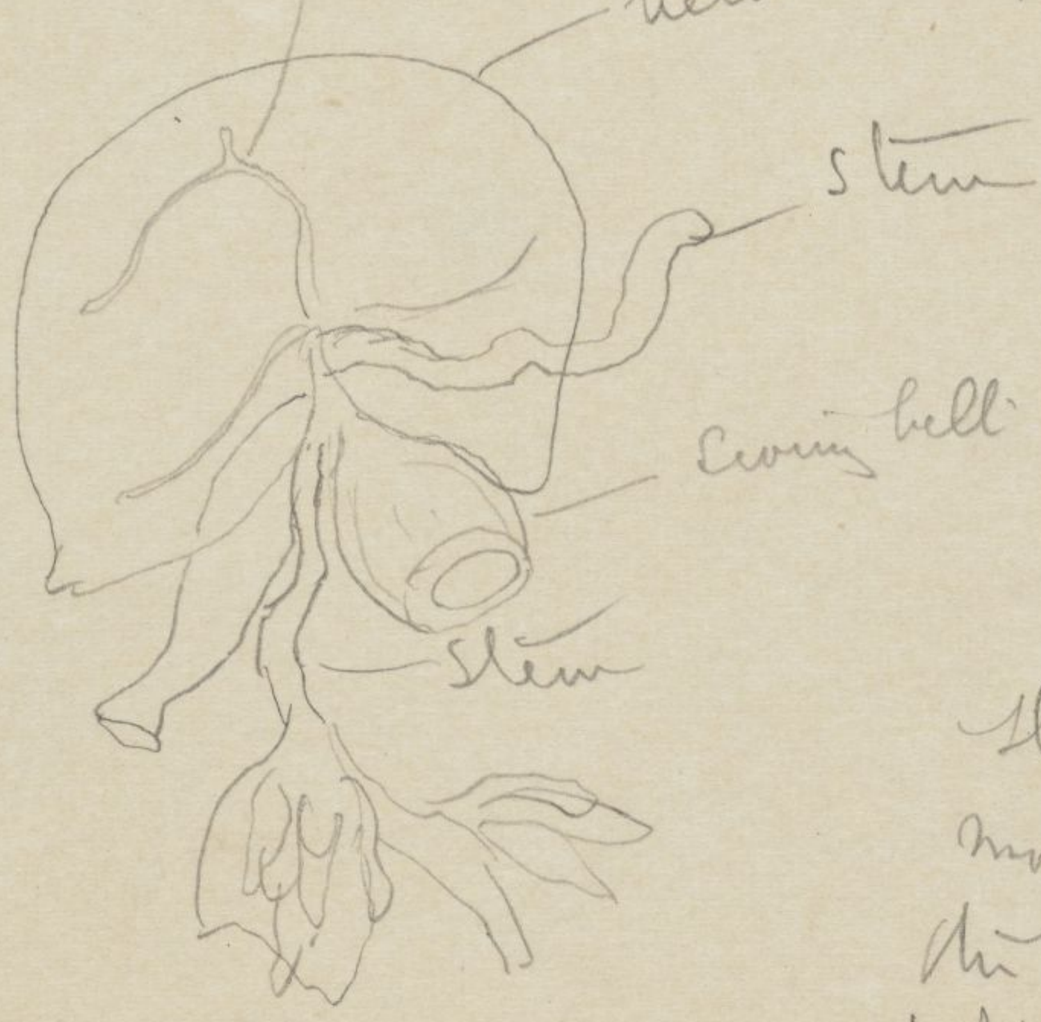
I nat length.

All in this bottle
this same spec -
incorrectly called
Endoxia in notes

Bottle 269 #4681 300 Surface

1 specimen

1 of the 4 canals

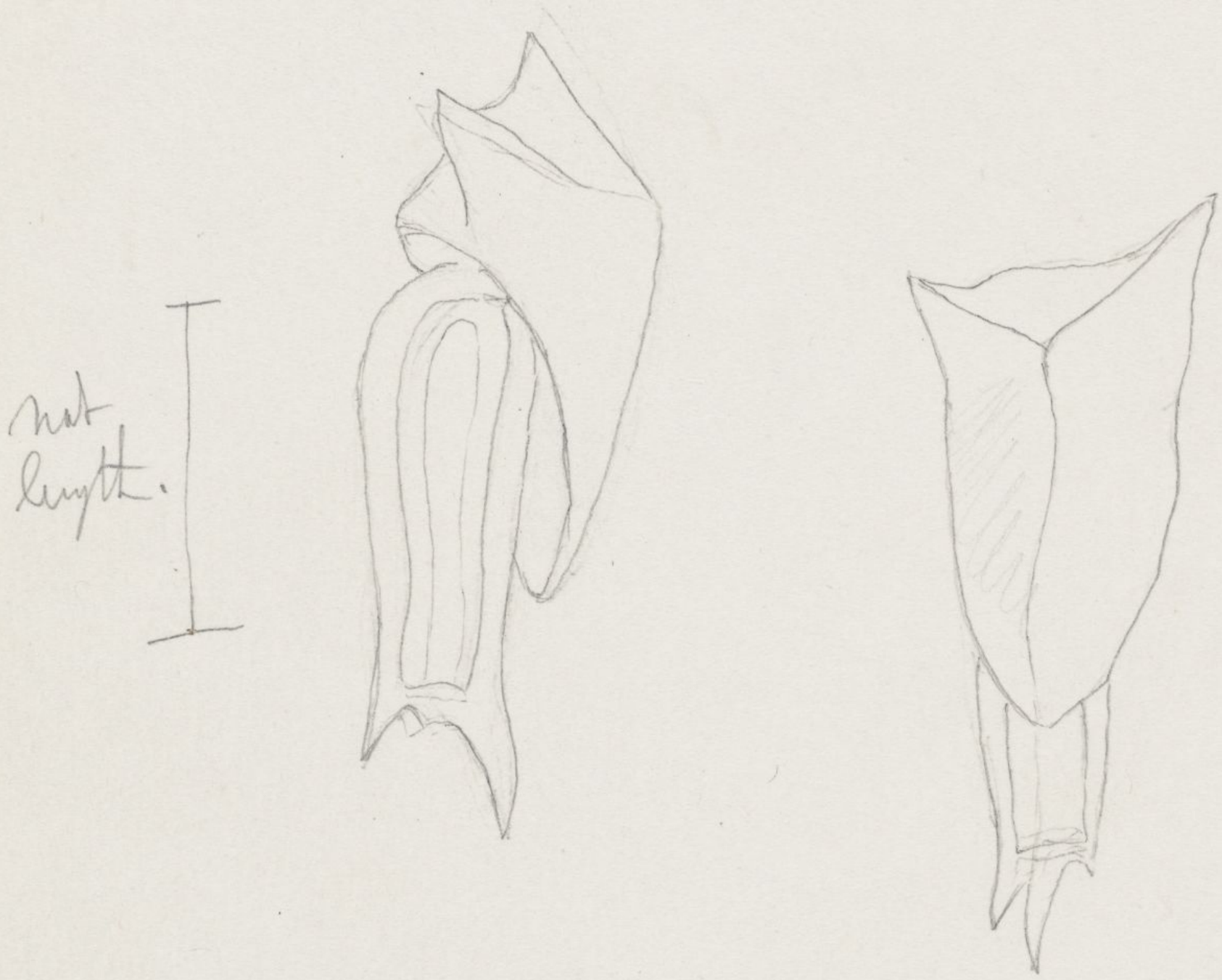


This is the
Monogas. fen. of
the large Praya?
taken at this same
station.
in process of growth

See platform / bracket
of Endoxia galea

#4714 - 300 to surf. 356.

one specimen
Ist. bell milk or very opaque



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Bottle 335 - Physalia utriculus

nat length for Alophoto of Brandt

This specimen has no sign of crest, & mantlum resembles the figures which I found given of "alophoto" - It seems sexually mature & the gonodendra are well developed as shown in sketch. There is no feeble siphon or tentacle on the anterior comidia, ~~but~~ although there is one in case of a small P. utriculus but little larger taken on same haul. I do not think a tentacle is lost from this group because specimen is otherwise perfect, well preserved.

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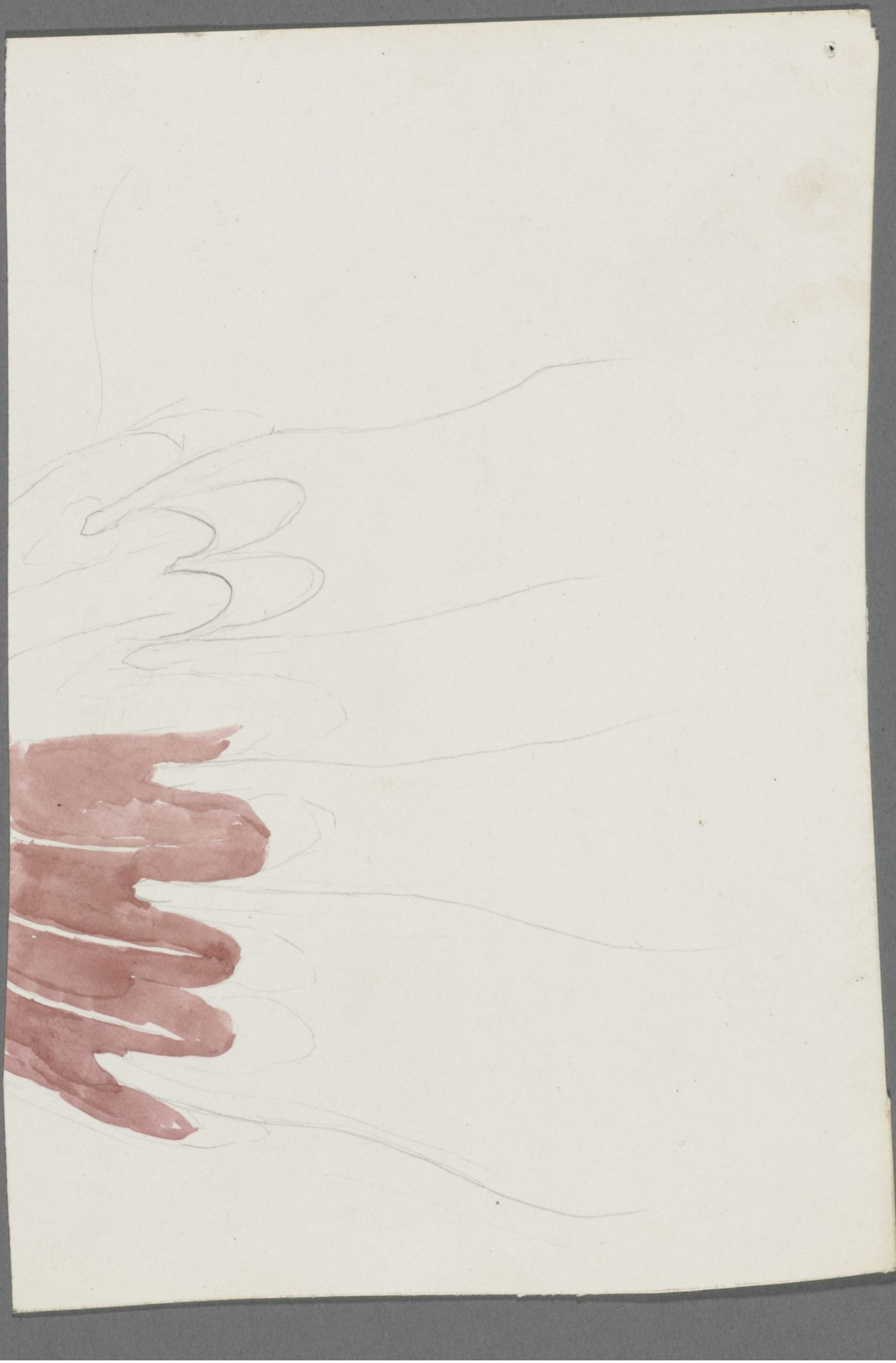

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Bottle 373-
#4720.

This is about the size of fig. by Agassiz Meyer. Pac S. Pacific

Ulosa above

This spec. has, besides the primary ant. Polypite, 3 siphons, & 2 large tentacles - Propulsors float & 1 Pol. resembling adult.

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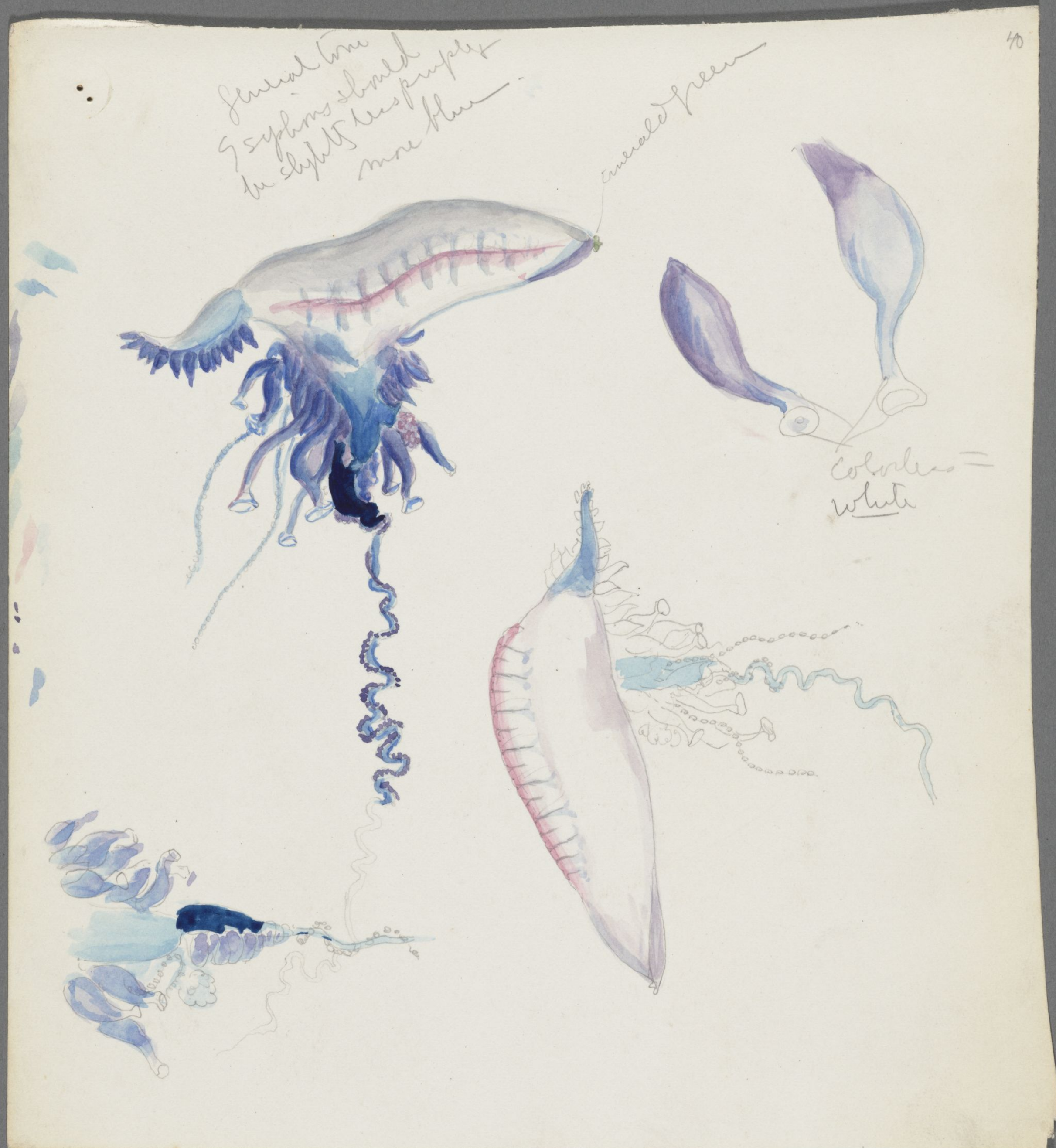

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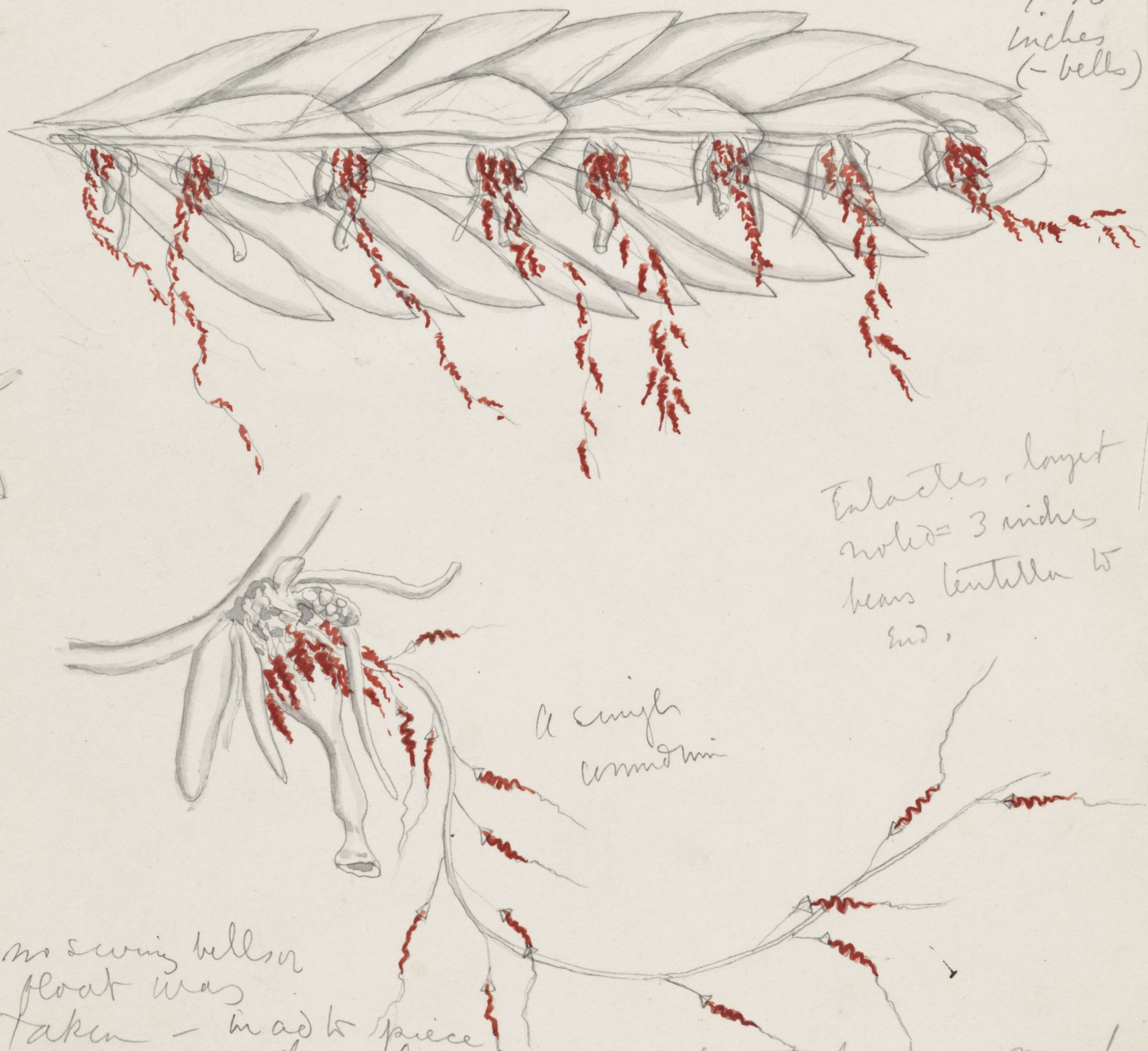
Bottle 4705

Agalma ??

nat. length of longest piece –

Total length = 9–10 inches (– bells)



Entacles, longest noted = 3 inches bears tentilla to end.

a single cormidium

no swimming bells or float was taken – in addn to piece sketched there were 4 other frags, aggregating about as much more – all evidently parts of same cor

Athorybia, Bottle 404 -
#4739 - 300 fathoms -

The general yellow tone is a pure pale amber, for which I have no paints - This seems to be a diff: species in the ahead & stalked, has diff shape & tucks which are very broad & short - all tracks in the bottle belong to this specimen -

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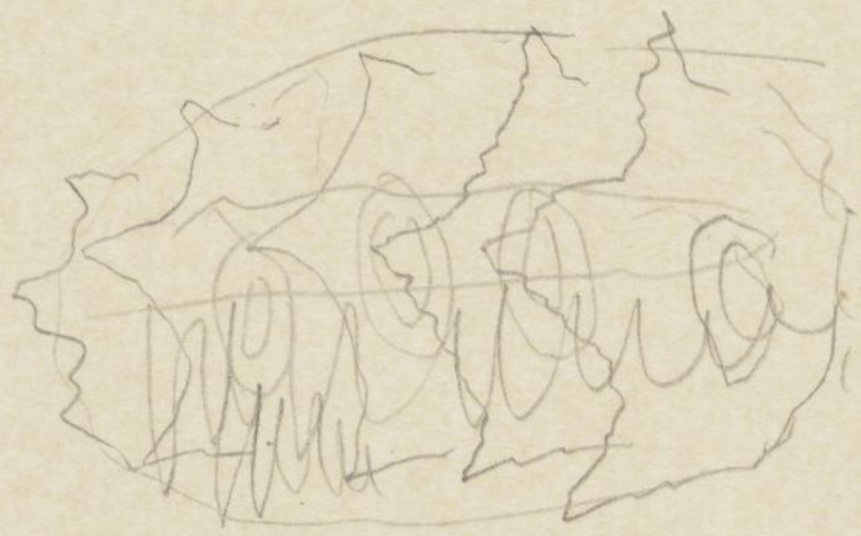
Bottle 262.

1 spec - ½ ⅝ of a ~~Crystallode~~ Polyphyes or bractia?
all in the bottle belongs to it



appear to be no hydro, but all are nectophores. These are arranged on opp. sides of the stem & alternate - when bottled there were 4 in each & these two rows, & some loose ones were also found.

The tentacles, bright red as in the other crystallodes - palpons other organs & stalk pale pink pale yellowish.

Bracteae & secondary margins bells are clear & also arrangements of nectophores all along corm

.57. Bolitta 57, Jan. Polyphyes .

2 specimens - seem to be entire. Genus???

seen from an end. axial view -

3 rows of swimming bells.
Tri cuspid -

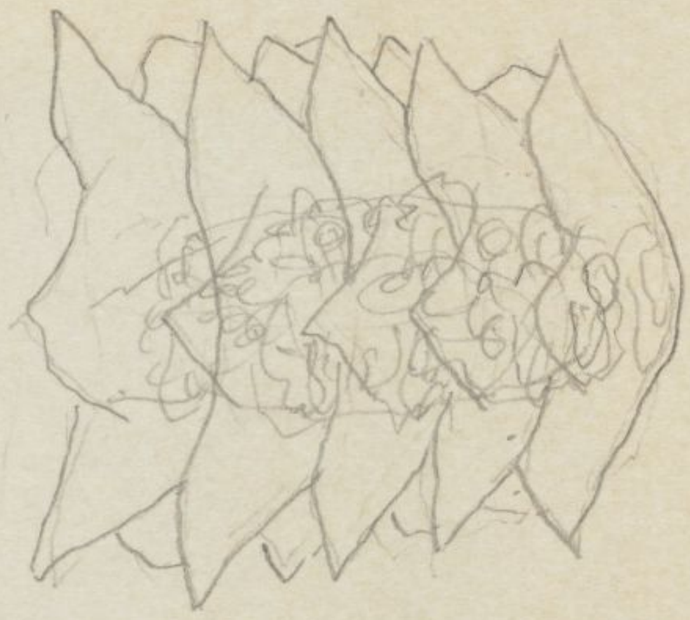
lateral view.
aspect.

gone face between two swimming bells.

Stiff & angid, hold well together, & well preserved

Genus ??

side view, arrangement of bells -



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~~S~~ 2.

Polyphyes ??

Bottle
62 -
4634.
300 fms - surface
2 specimens
both complete

Endoxia ?
or related
Hydrophysidae -

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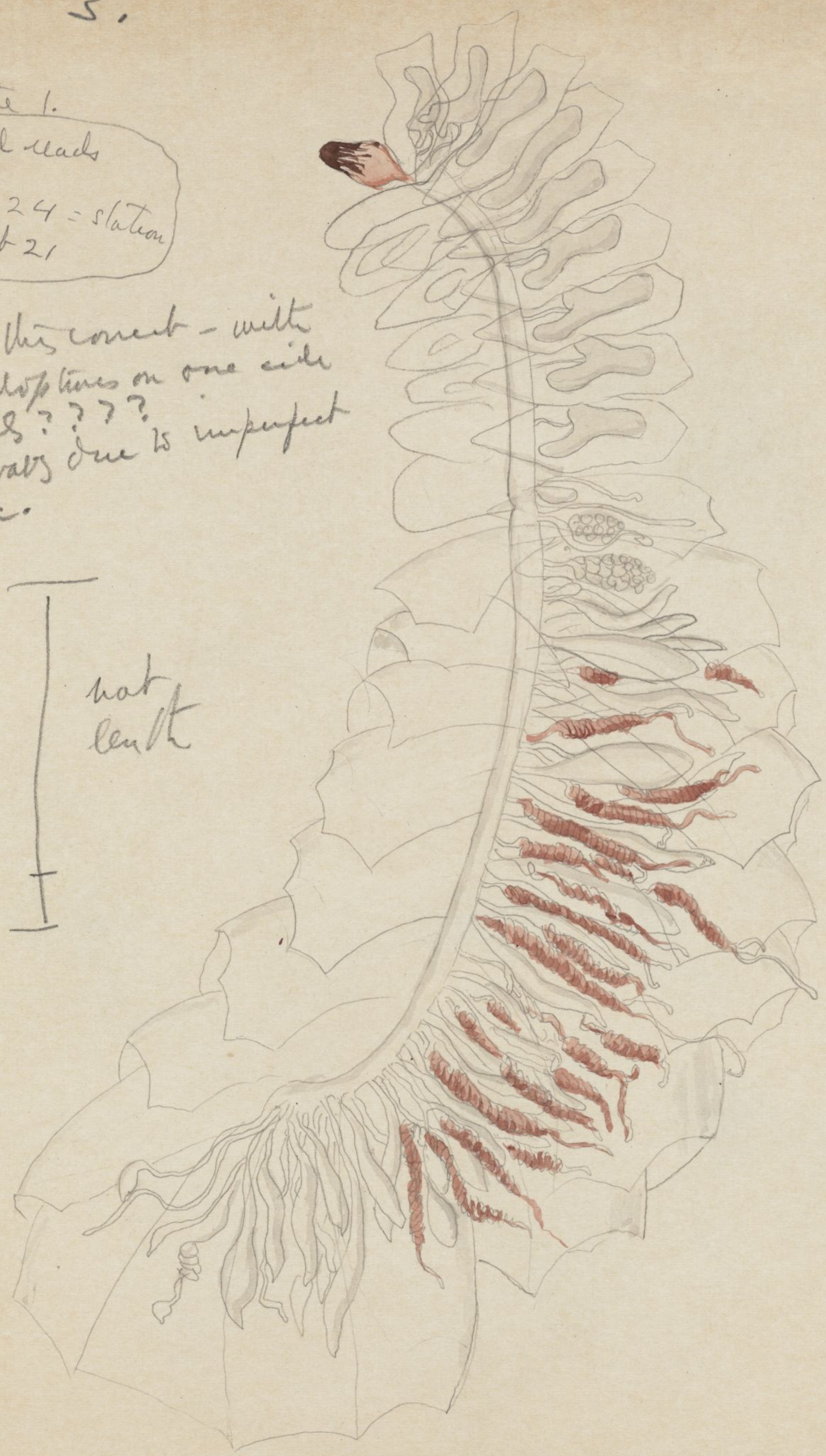
3.

Bottle 1.

Label reads

4624 = station
Oct 21

is this correct – with
nectophores on one side
only? ? ? ?
probably due to imperfect
spec.



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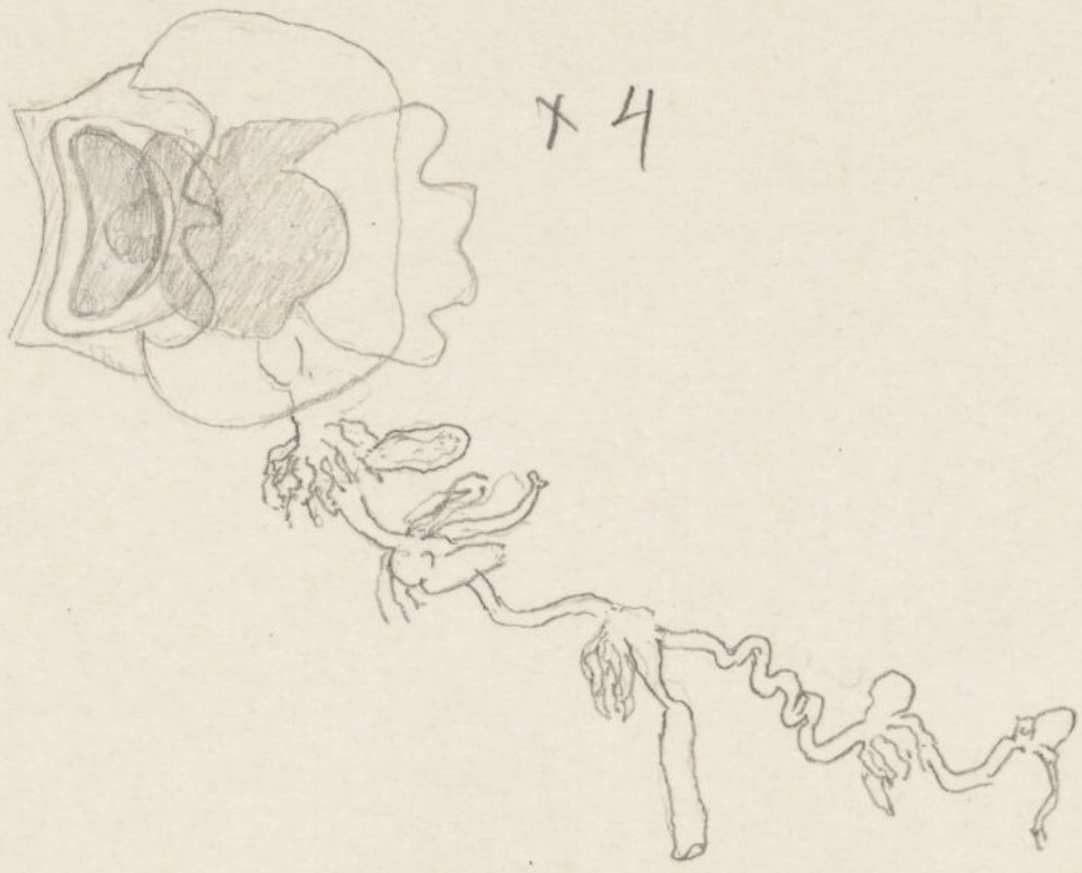
25

Bottle no 177.

#4659, 500-surface

Dorsal outline of bell.



x 4

Side outline of bell & cam.

Parts contained cam is broken off of bell, but both are together in a small vial.

x 4.

Entirely colorless.

This is the "slipper" bell, of which have preserved many. Cormidia = Monogastric, each with a single palpon.

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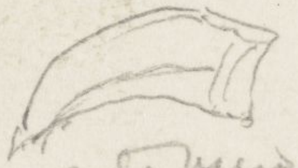
Bottle 366.

Surface of bracts is wrinkled -

Stem & Cormidia very white no cirri of red in any specimen of this species.

one bract



side view of bract

Cystonectes sp. 2 - ~~Siphonome~~

nectosome essentially like that of the other cystonectes - Siphosome - entirely colorless - tentacles, instead of being brick red, milky white - Bracts are of a diff. shape - though arranged on stem in essentially the same manner - distinguishing points are colorless, & form of bracts - several specimens of this spc. small ones, already taken - but none with nectophores still attached -

General appearance of siphosome more rounded & less angular than in the other species -

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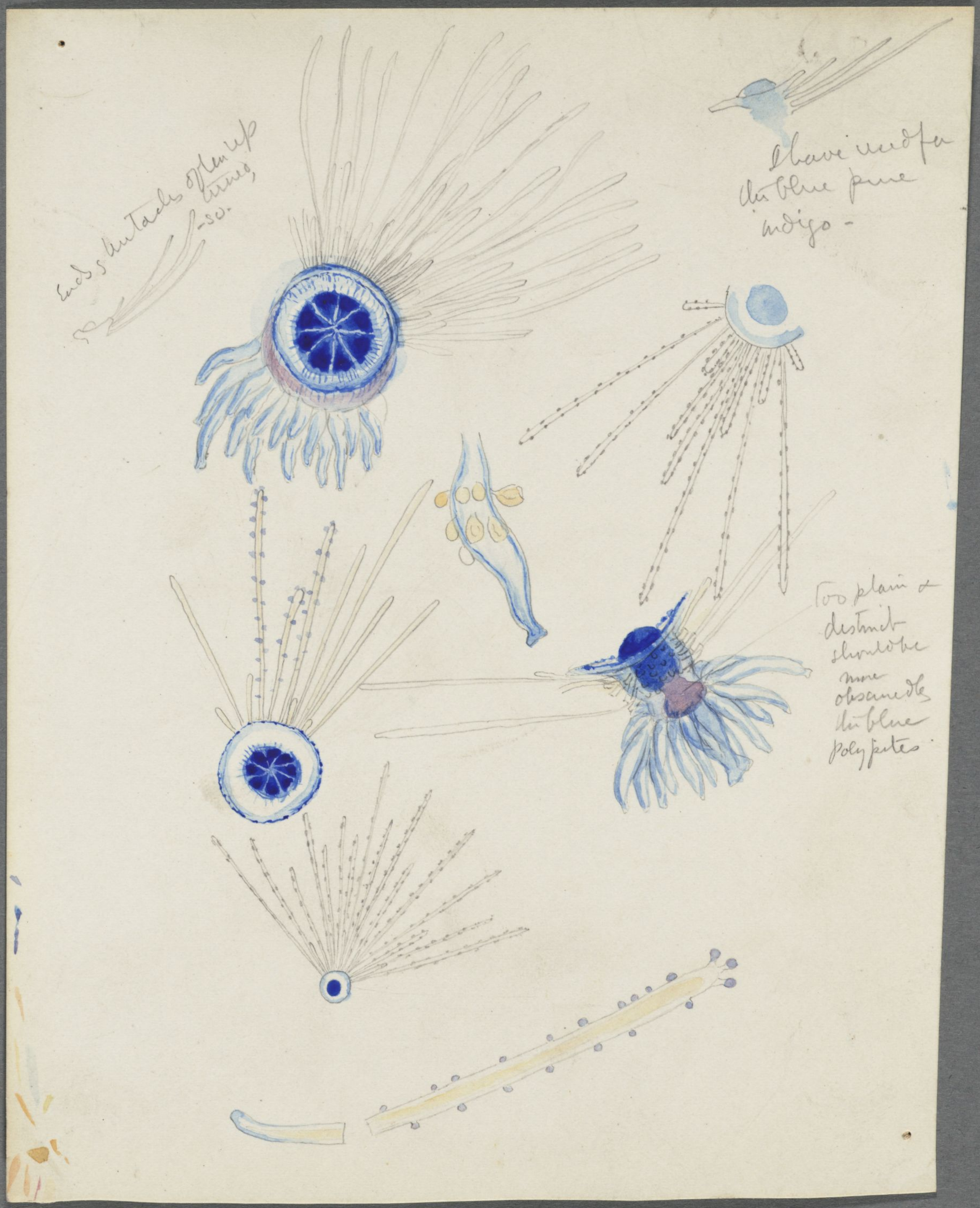

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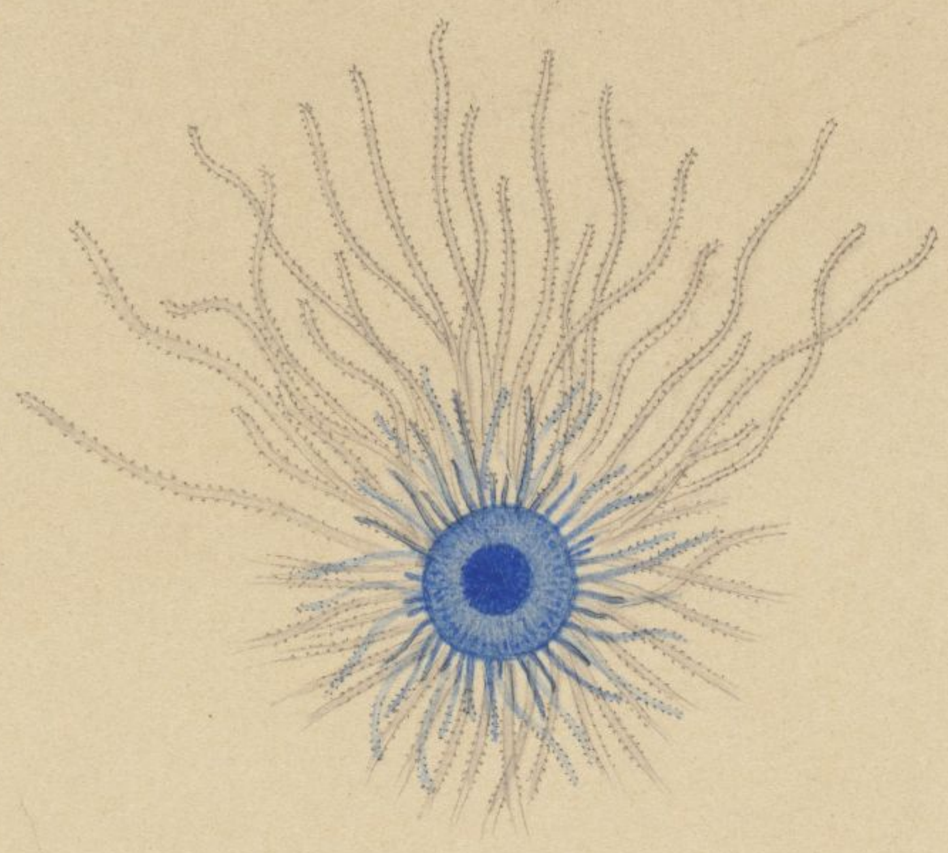
Stn. 4685 den 10 Januar Porpema - mit dank empf. darkert pneumatica.



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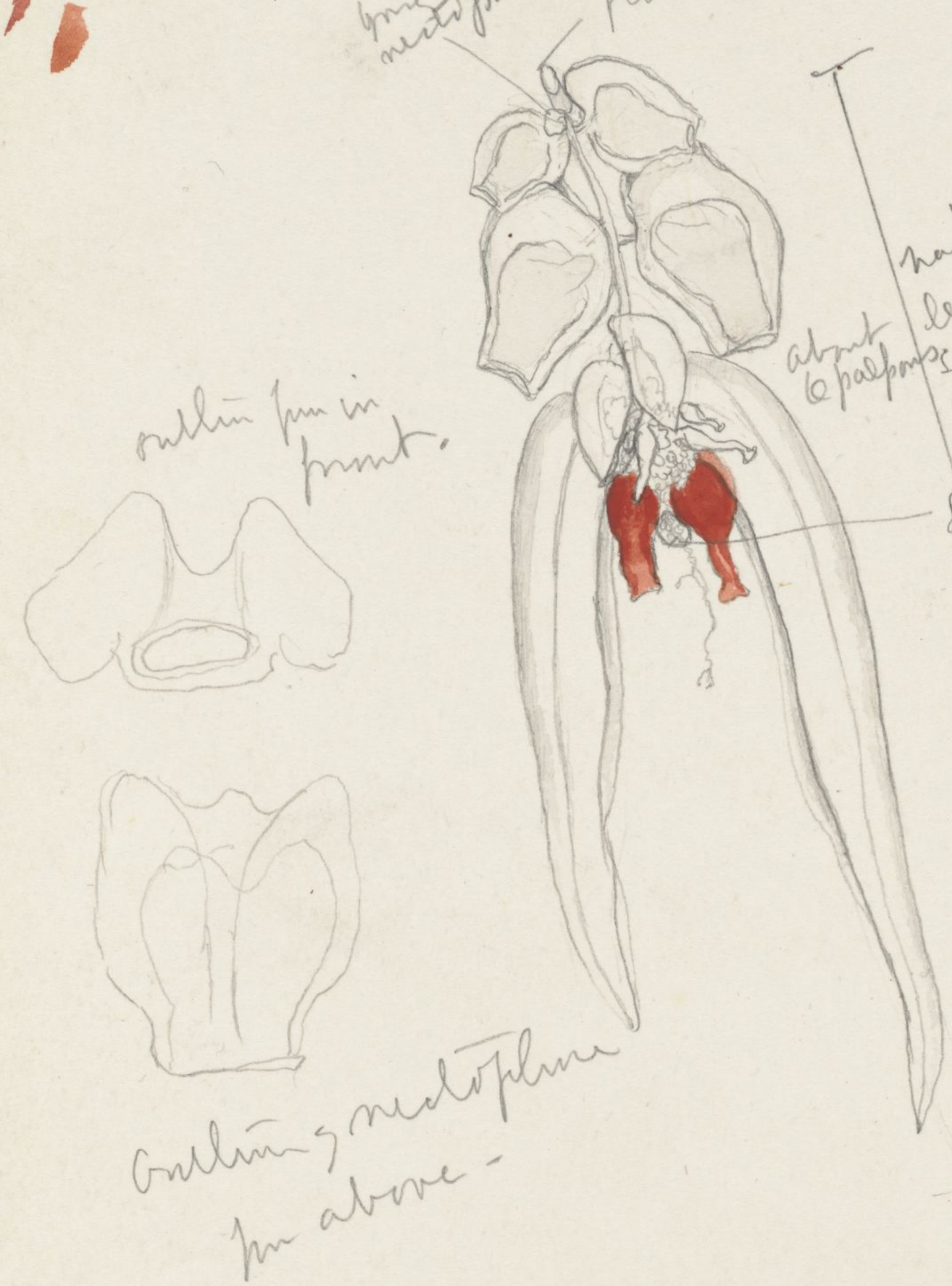
4717 - in Trawl - 2153 fms K surface
Bottle 365.



nectalia
cf. figs of N. Lobigo from Canaries, Haeckel - has only 4 nectophores, biserially arranged - + 4? bracts - These are 2 long -, + 2 short - but the latter seem both to be on same side of stem - either two small or one or two small - one on opp. side have been lost. The 2 long bracts are (~~apparently~~) in radii normal to radii of the 2 rows of nectophores - but coronal so to much twisted that apparently they are otherwise - as in this figure -
in lys in radii at L to nectophores. = right + left, this agree with Haeckel's nectalia Lobigo.

arrangement of corm = N. Lobigo first whorl of bracts then whorl of palpons, then the 2 siphons with their tentacles, (N. Lobigo has 4) + then last of all one or two gonophores. nectophore in form very similar to N. Lobigo - siphons are by side vermilion-orange — other parts of the animal, including float, entirely colorless —

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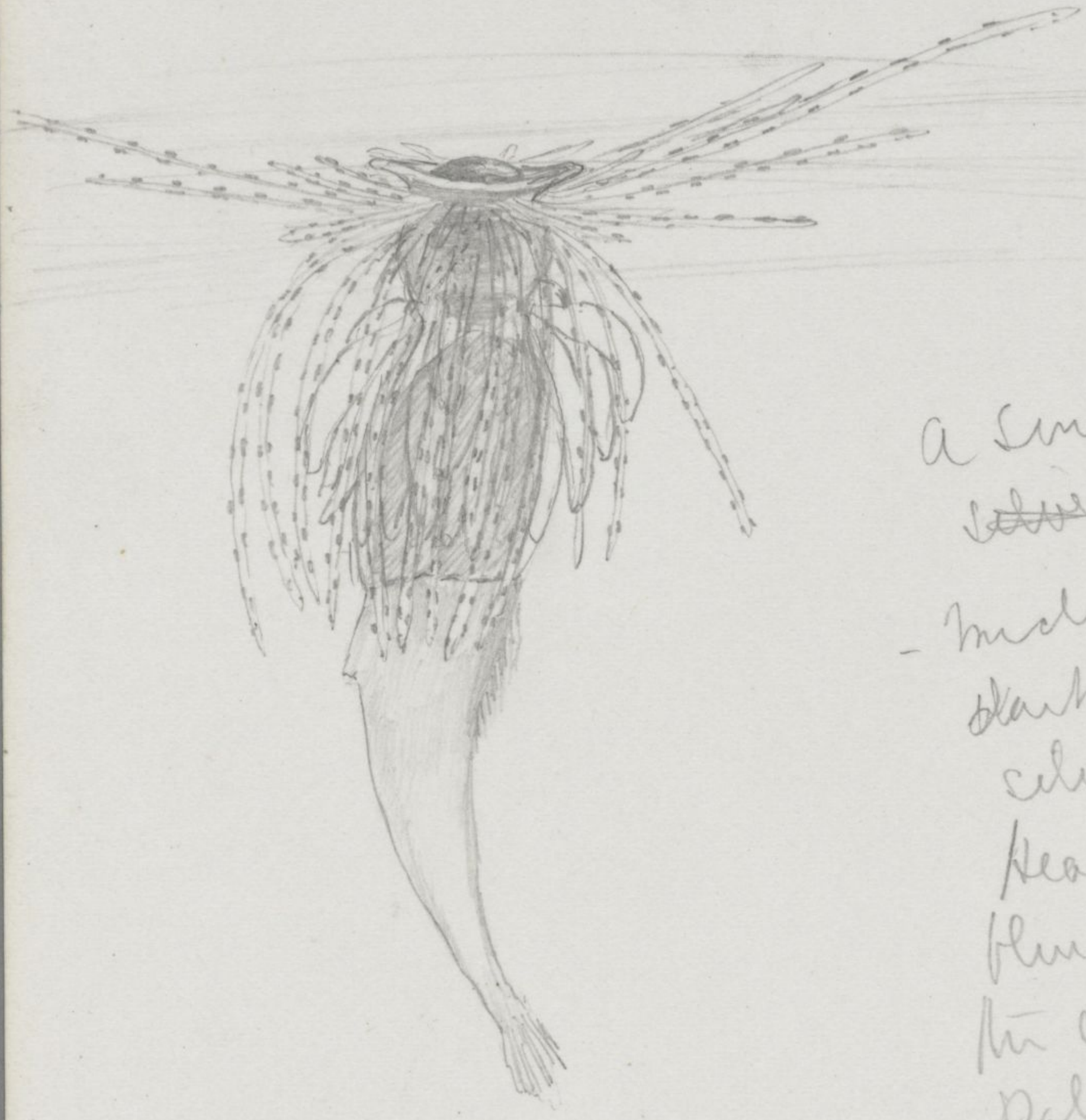
Bottle 284.



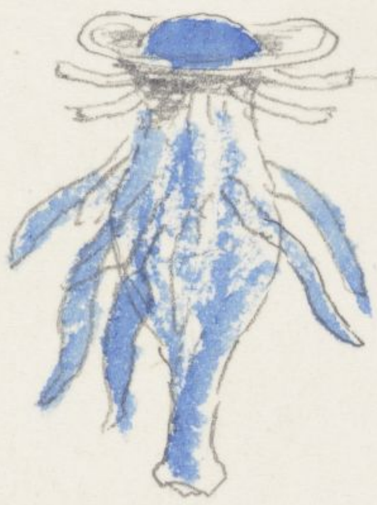
a small ~~[illegible]~~ fish - nectoptum - black with silvery markings. Head and body flush, through the antral polysperti

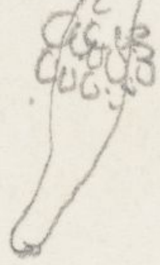
Species? X6. 4715 = 300 Hydrof

Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Porpema Bolte 281 – 286
#4685 Surface 20 spe.

diam of float
length





Floats on the surface
tentacles out straight & flat.

nat size

scales & length of
tentacle which I
observed (Westergren)
3 m. diam

See Porpema, Haeckel, chall – 3 m. diam
s buffout – Porpema, tentacles arranged regular
all around float, Porpalia, arranged in
groups. He does not mention colors. Blue here
is pure ultramarine (Westergren) which I have not –
knobs on tentacles have a trans – violet & axis
s tentacle is pale amber, sketched by Westergren.
by many medusa buds on palpons.

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14.

Young - see Weslegrens Stelch
S ad nat

~~24~~
3641
surface - largest diam 12 mm.
Nov. 3.
4 specimens.

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Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Immophyadae? or Diphyadae?

This is
Diphyabyla Hubrechti
Lens van Riemsdijk - very fine bottle belle & fine
good figure Sir -

Bottle 295

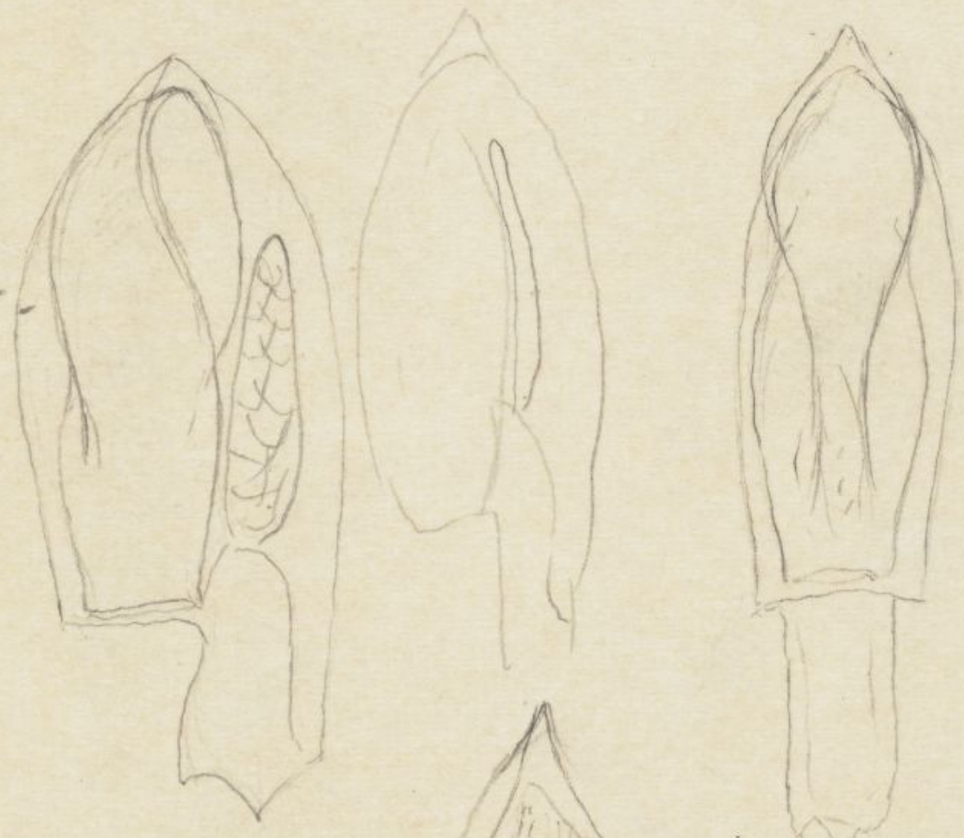
I nat length.

camera drawing -

One specimen - no second
bell found - peculiar
opaque appearance, colorless -

Bottle 289.

cf. Cymbonectes, which
has grown more open
but like this in outline



I nat
length -

Front & side outlines -
Twisted bell - many
specimens well preserved
An unsaea in same
bottle also twisted
artificial ???

outlines of
Phallocystis
varies greatly -
Cf. for twisted
form of similar
L.D. Bipartita, Costa -
Cat - Lee Chuyen
Thalipas.

ventral view showing
amount of free opening of
hydroecium
'prone'

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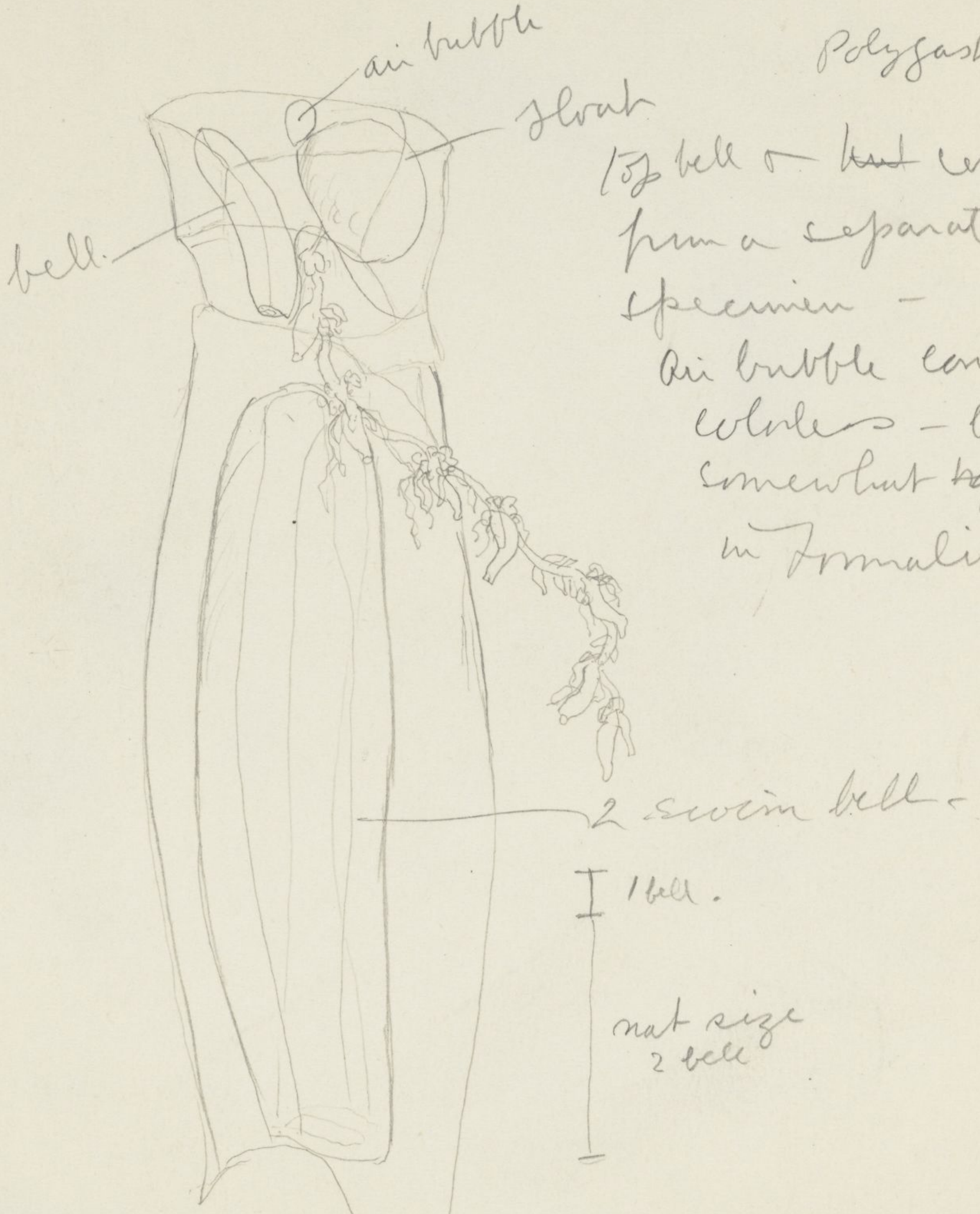
33

Bottle 153. & other bottle

nothing.



Polygastric -

1 bell or ~~but~~ swim from a separated specimen -

Air bubble constant. colorless - becomes somewhat opaque in Formalin -

Calpe? See Calpe gegenbauri, Haeckel, Challenger Siphonophores, Plate XXXIX, + P. 164.

(over)

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See also bottle 254 – for a spe; which may be diff; or may be the young of this. about ½ as long, or slightly diff. proportions
5 1 bell, swimming bell or float.

2 specimens, the spe; + several detached pist bells.

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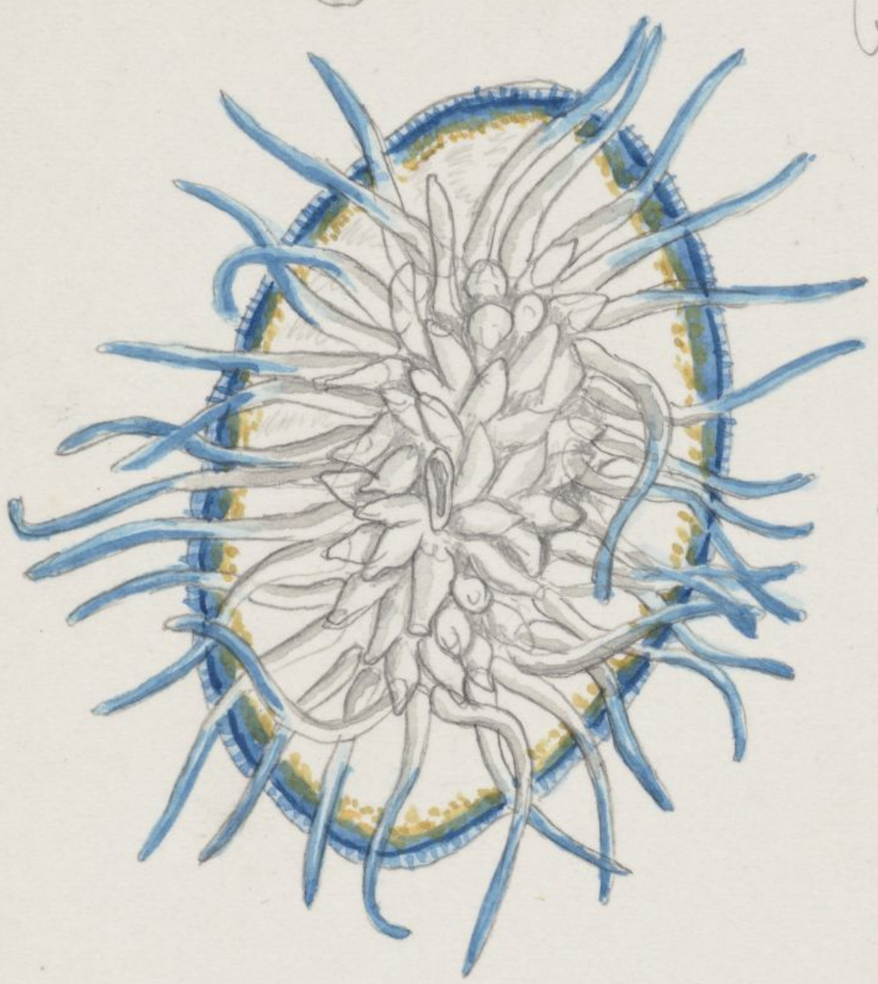
Bottle 346 #4610 – surface
velella

colors very much like the Nataria already sketched.

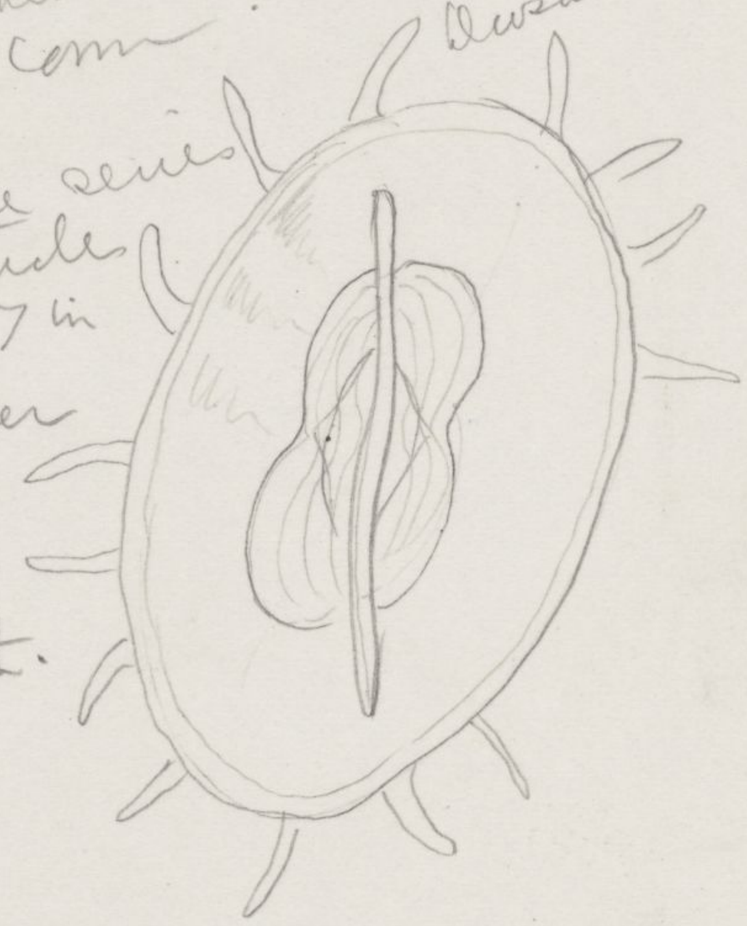
one repro. polypites with medusa buds



central sac is somewhat contracted
corm.

dorsal outline

single series of tubercles about 37 in number



I nat length.

outline from one side.

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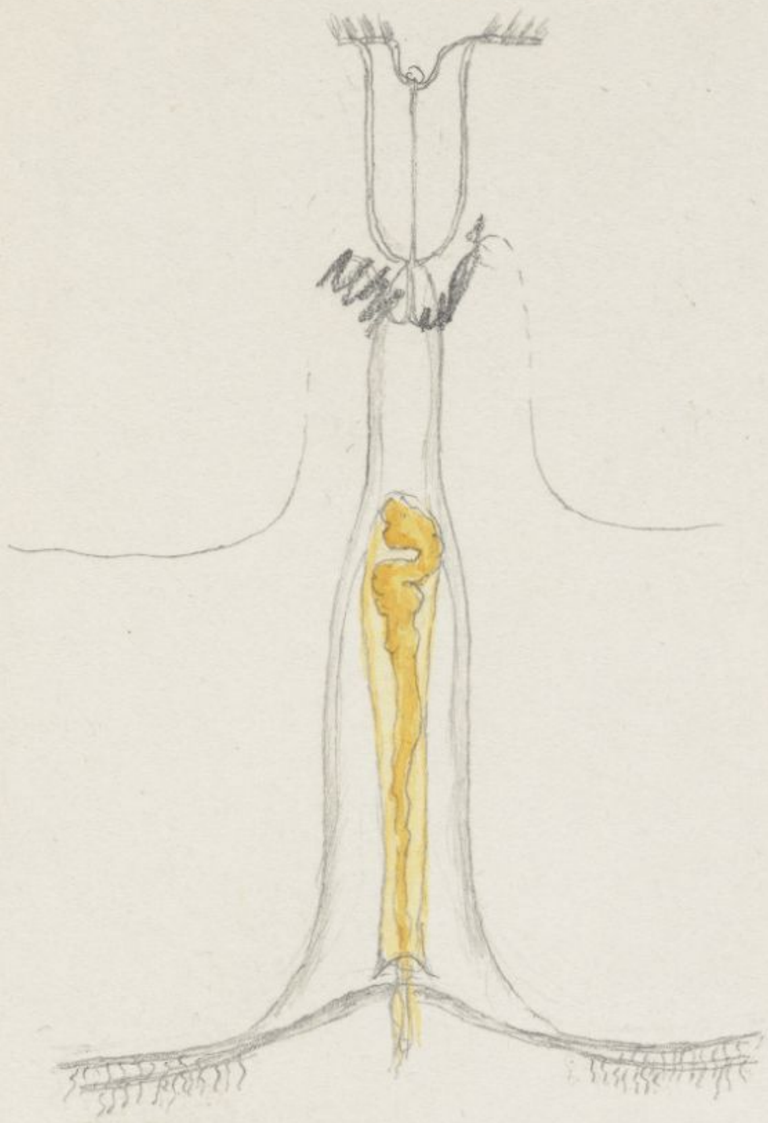
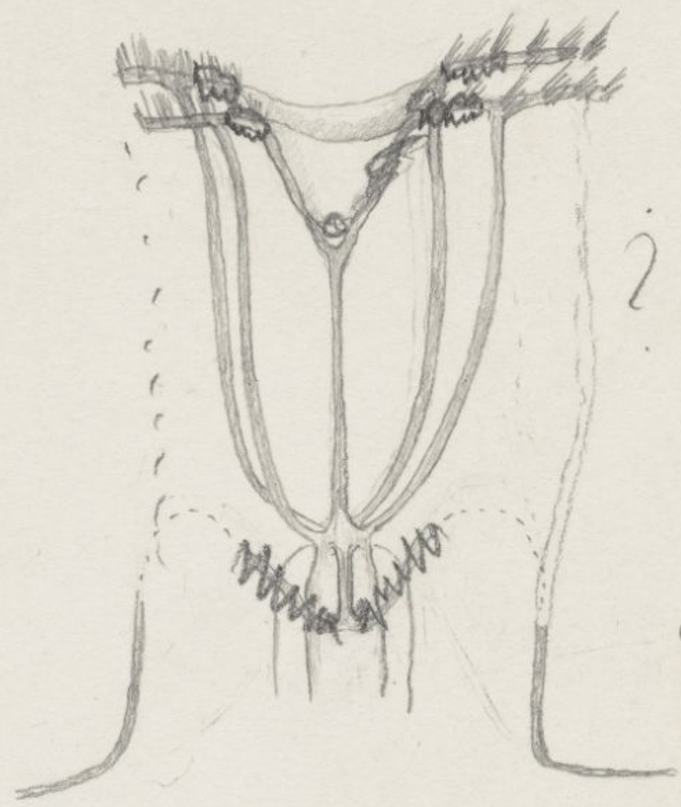
Cestus Pectinalis. #4546 - 180 meters Acapulco

nectosomach in saggital plane.



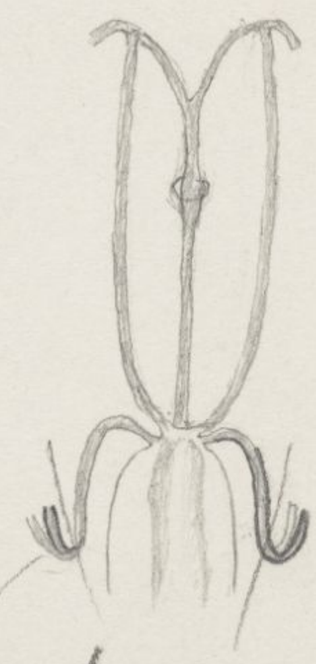
Saggital plane.



connections of the canal with the others is lost. probably same as in C. Venerin for which see Chun

Tentacular plane.

canal & combs.. combs large & cilia big & close.



only half of the upper canals show the other two lie behind them

Tent canal.

— Cestus Pectinatus — # 4546 Hyd. about 180 mile off Acapulco.

2 feet long.

Not lying
Stomach.

this dist. is rather too near.

when preserved the cilia of the swimming plates become agglutinated together, making an opaque mass.

Tip of the band
the yellow spot
agrees exactly with
that of Maldive
specimens.

not seen
this fragment

view of stomach & tentacular
cheaths, in
tentacular
plane

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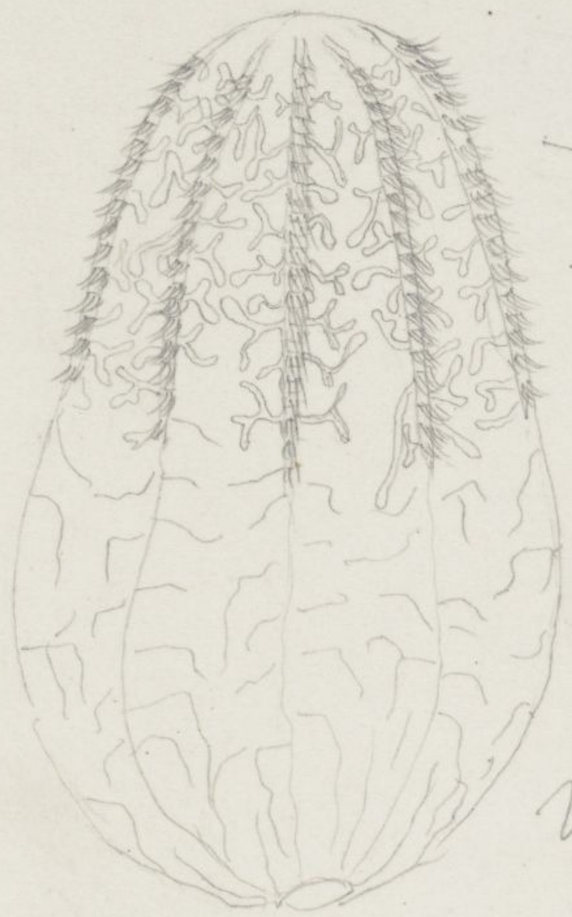
Bottle 72.

8

x2.

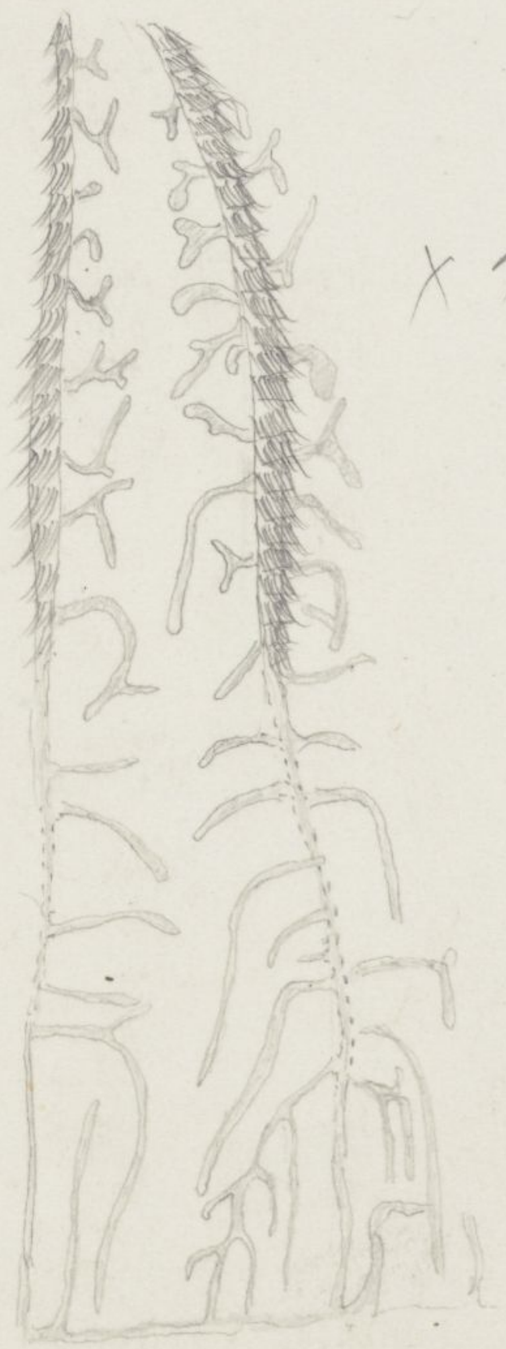


should be more space between canals of each comb.

mouth strongly contracted

milky, colorless.

x 4.



Canals of one octant.

Canals of adjoing bands do not anastomose (never?).

mouth artificially opened.

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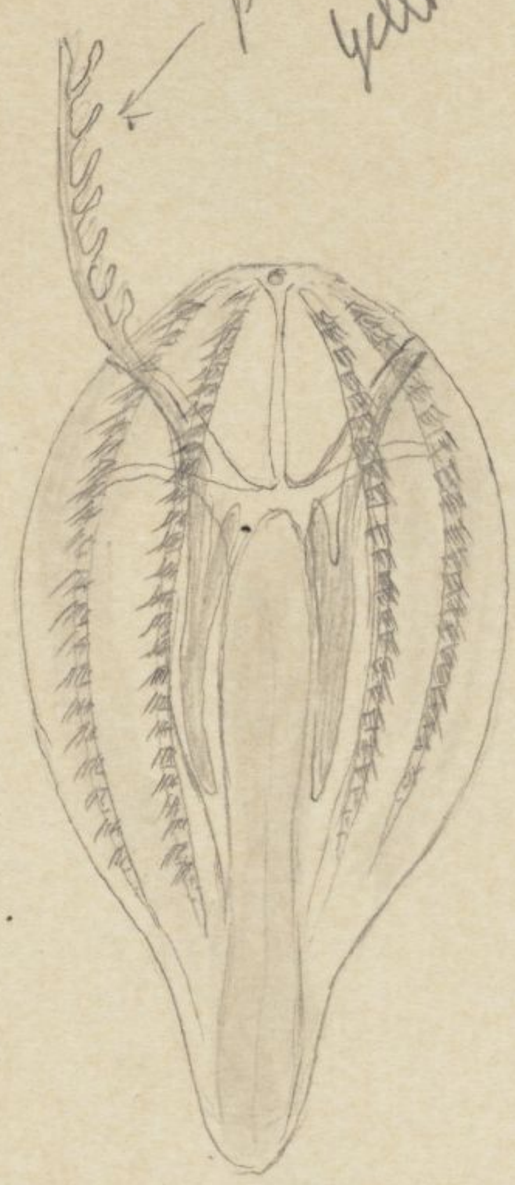
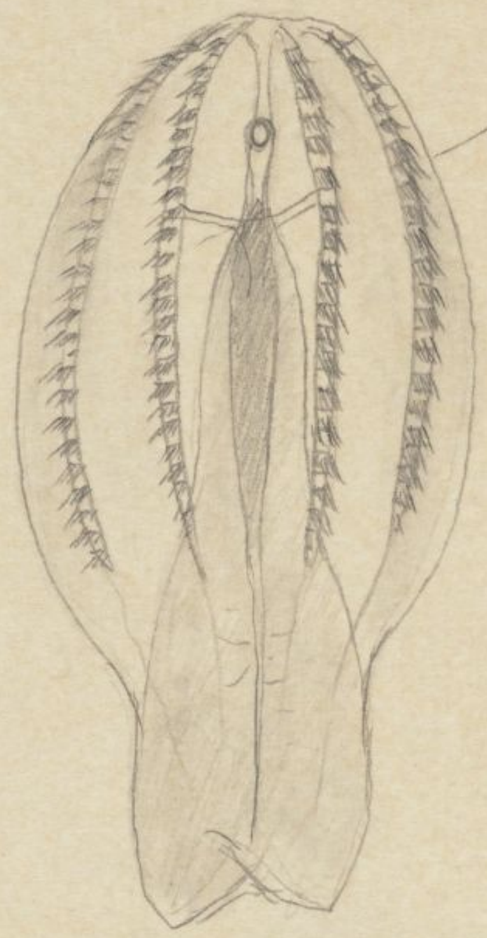
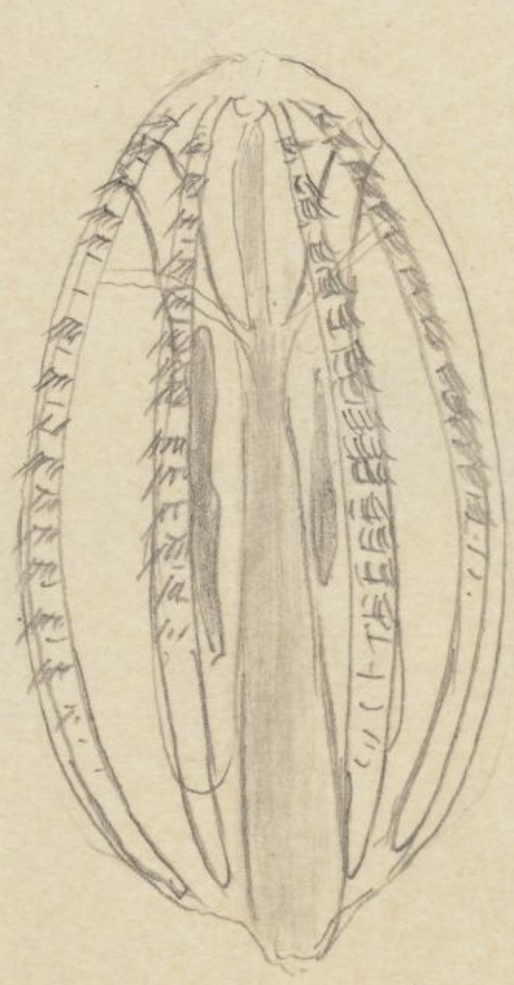
Bottle 57 - #4627 - Nov. 3.





as similar to Lampetia S aq. & Meyer from S Pacific - but has yellow tentacles instead of milky.

Completely smooth Bottle 146 - "Smooth Chunophore" Bottle 159.



This chunophore seems peculiar & appears to lose its combs with age.

These 3 (in this bottle) are partially "smooth" the combs being partly rubbed off & delapidated but the combs are perfect

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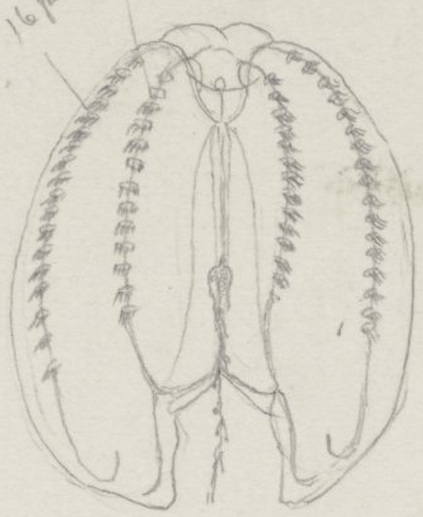
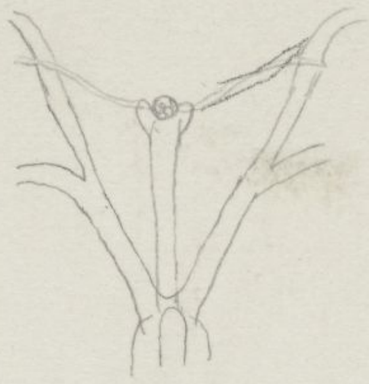
Apy Mnemiopsis. Acapulco, Feb. 28 – A.M.

1 often at same time as the large.

16 plates, 12 plates

The arrangement canals is same as in Jewkes' fig.





nat length

Colubiss.

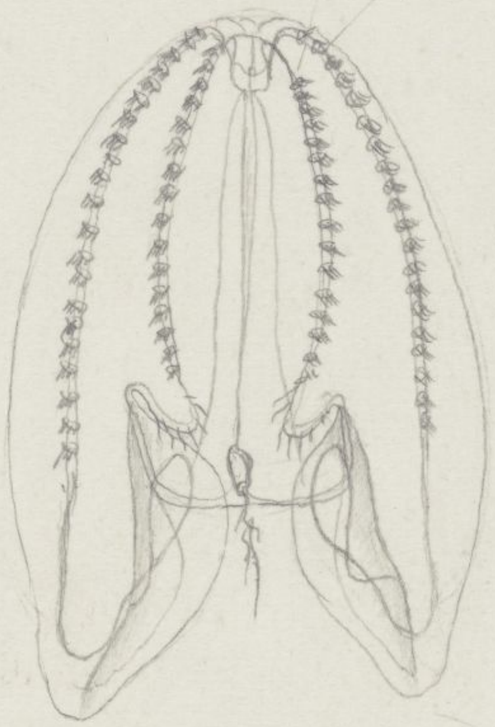
cf. Jelly. of Jewkes

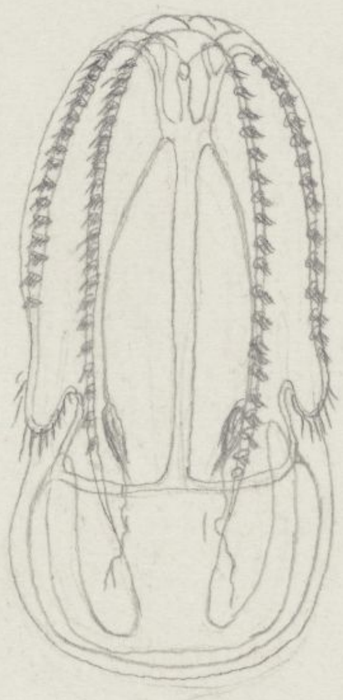
Mnem. Leidyi

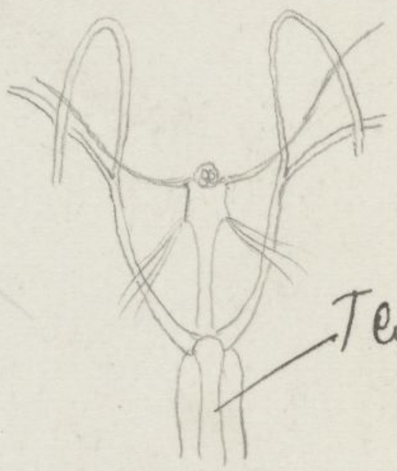
Tent.

16 plate

20 plates







Tent.

nat length

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Apneumopsis
Acapulco Mx. Feb. 20.

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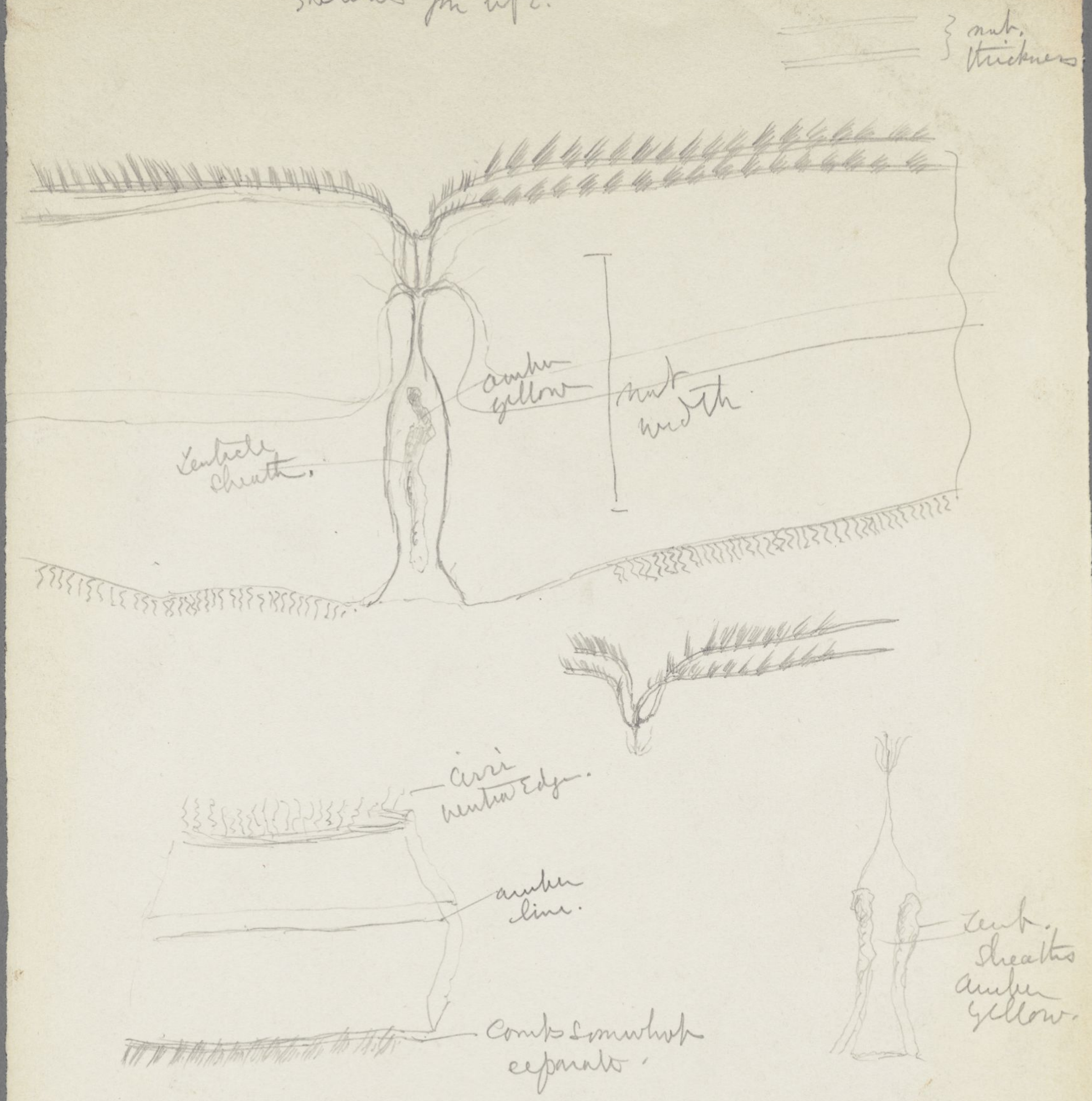
skeletons from life.



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Bottle 320 – 4604704 surface
Dec 27.

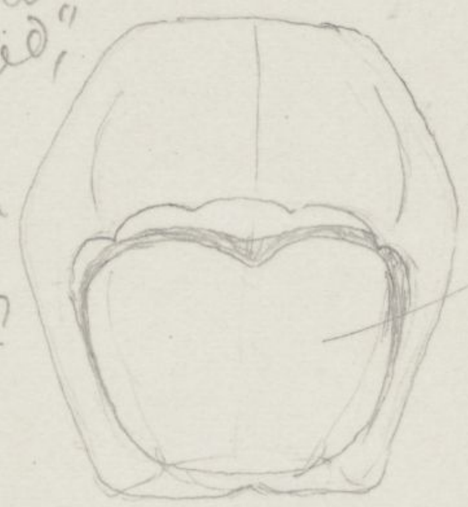
Polyphyes.

2 spc – largest has 4 bells & 1 minute bell – other has 3 bells – 2 bells are detached & loose in bottle

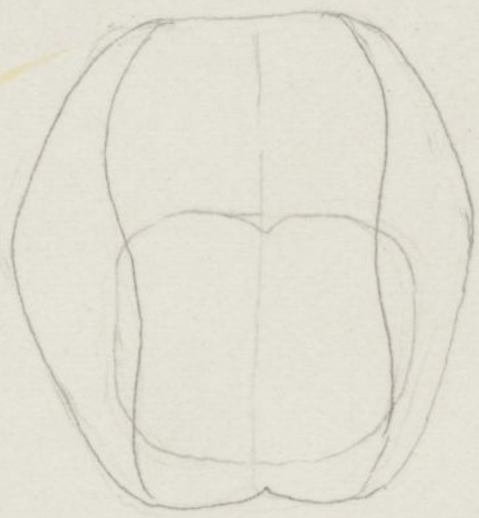
nat size

this red is very light & transparent a "blood red" without vermilion

Pure carmin ??



opening bell



back (Dorsal) aspect of nectophore

side view of nectophore

bells pure greenish blue.

This is spc. taken before but more highly colored.

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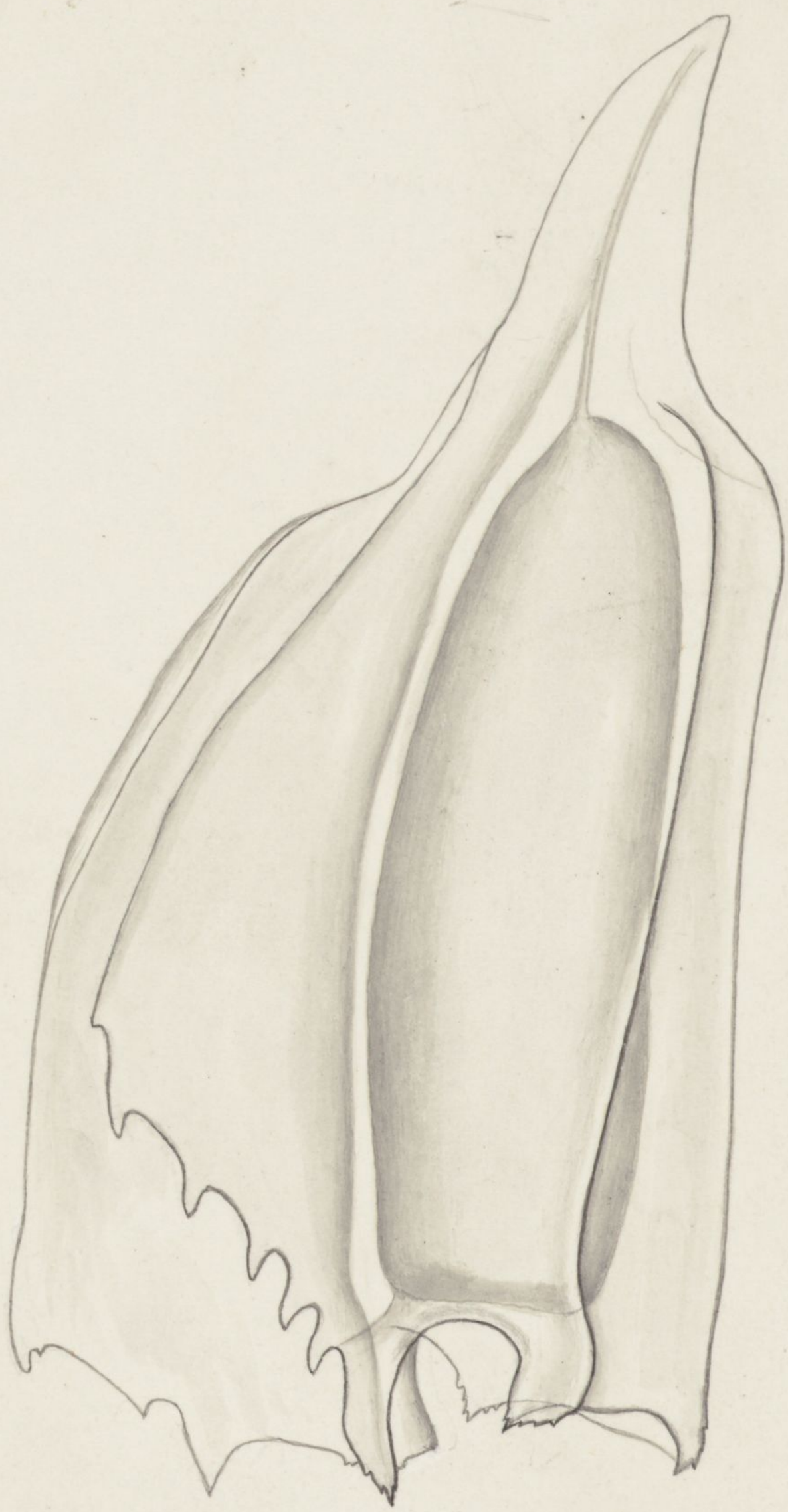

X6+ # 4715-300 h Lenface

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Galeolaria, Feb. 18.

Part of coma - enlarged ½ -
several specimens, when
floating in water, extended
to a length of at least 18 inches -
Coma & siphons of tentacles
rose pink - gonophores bright orange.
Several of latter preserved in
Hemming's fluid
Male gonophores are orange.
Female " " are opaque white

Detached
Cormidia
showing siphon,
bract, tentacle
sketch of ♂ & ♀
gonophore

The Cormidia
have no special
nectophores.
∴ Galeolaria
(Siphon.)
Dysphysia has such
nectophores.

J. Guadalupe Lees.

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Stn 4707 300 fms K Sumfari Dec 29

Westergren

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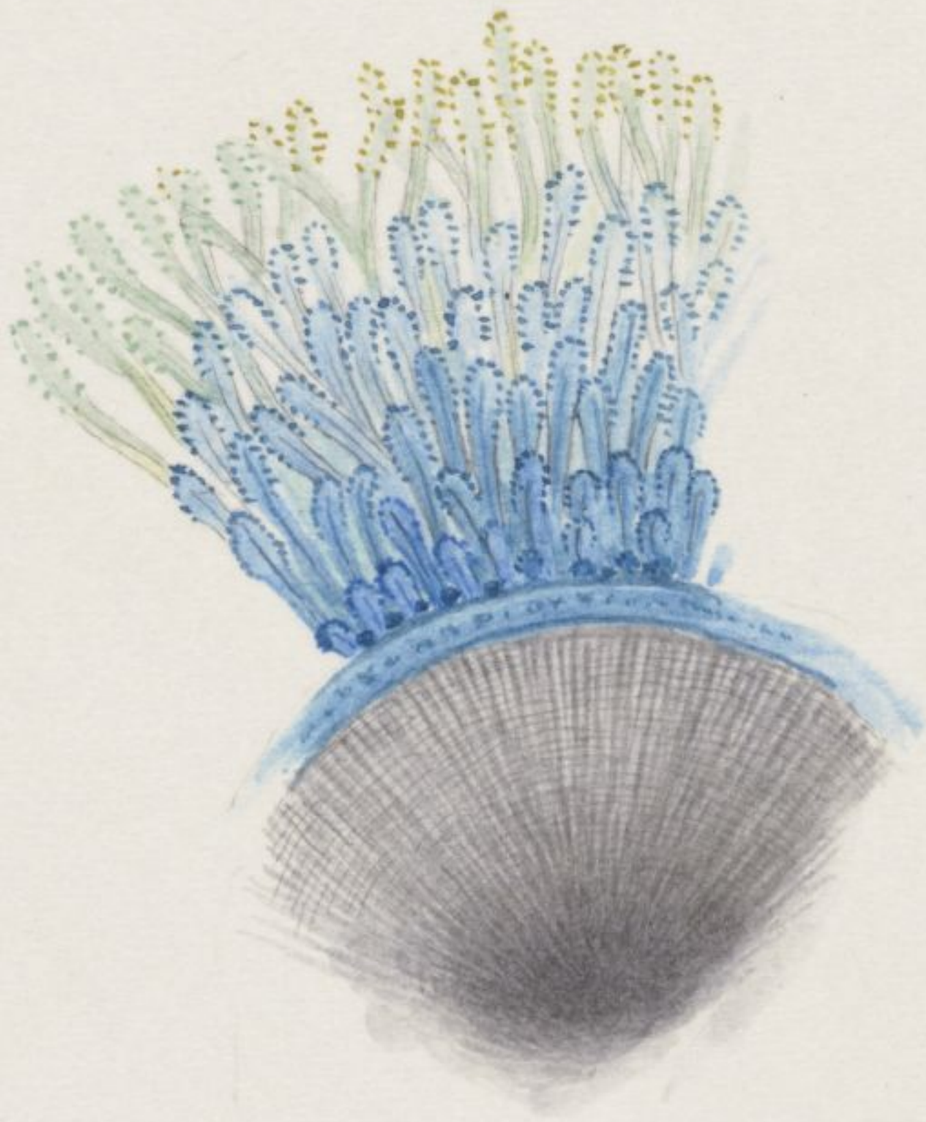
Station 4649 surface 5010 f.



~~H. B.~~ Bigelow Westergren

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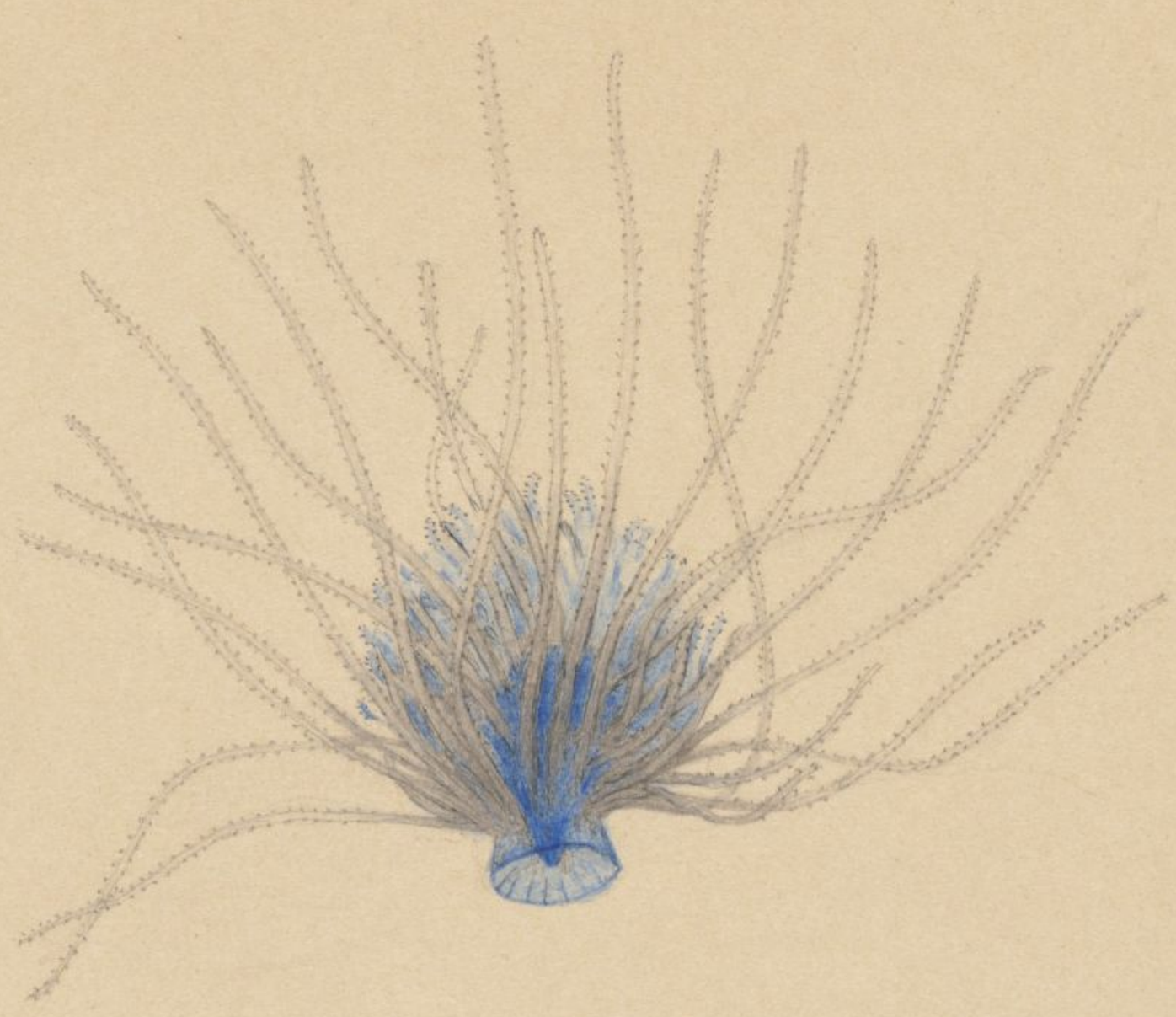

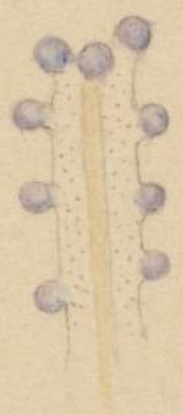

Nat 4685 Sinfare Ber 10/. Porpema

~~H.B. Bigelow~~ Westergren

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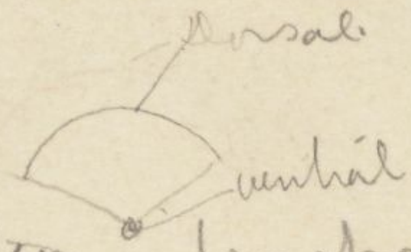
28

Bottle no. 172. - + bracts -
+ colony Bottle no 183 -

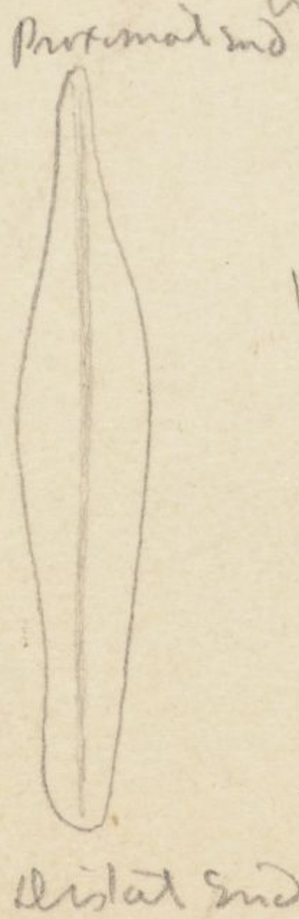
X 3½

Athorybia
The cenn is contracted - came in so in the net - In the Formol most of the bracts were thrown off but are preserved in same bottle with the specimen. Principally diff from Halbels Ceylon spc. appears to be the form & smoothness of bracts - About 20 - 25 - bracts - Besides the float, tentacles show a purple line - + bracts are faint blush in part

side view of one bract.



Section of bract at this level.



ventral view of bract.

Bract viewed partly from one side

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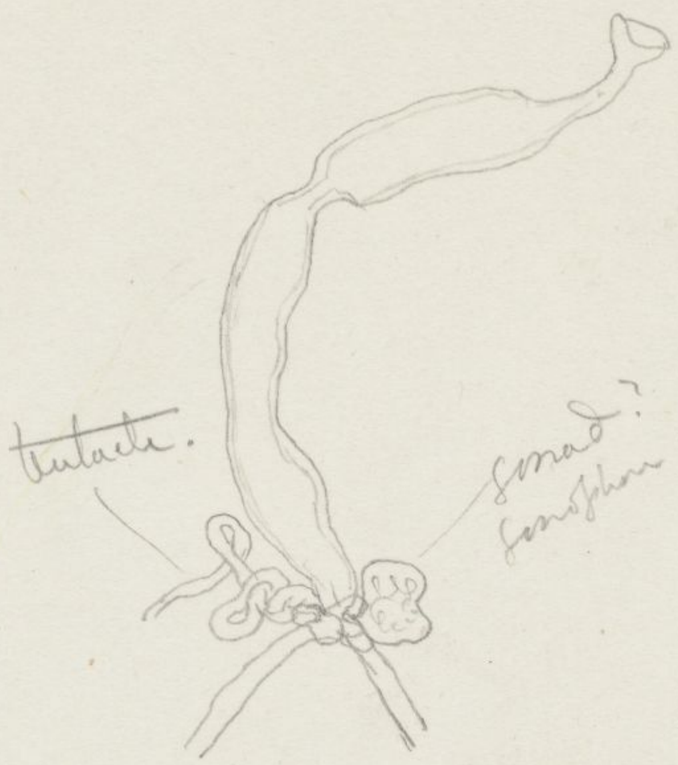
41

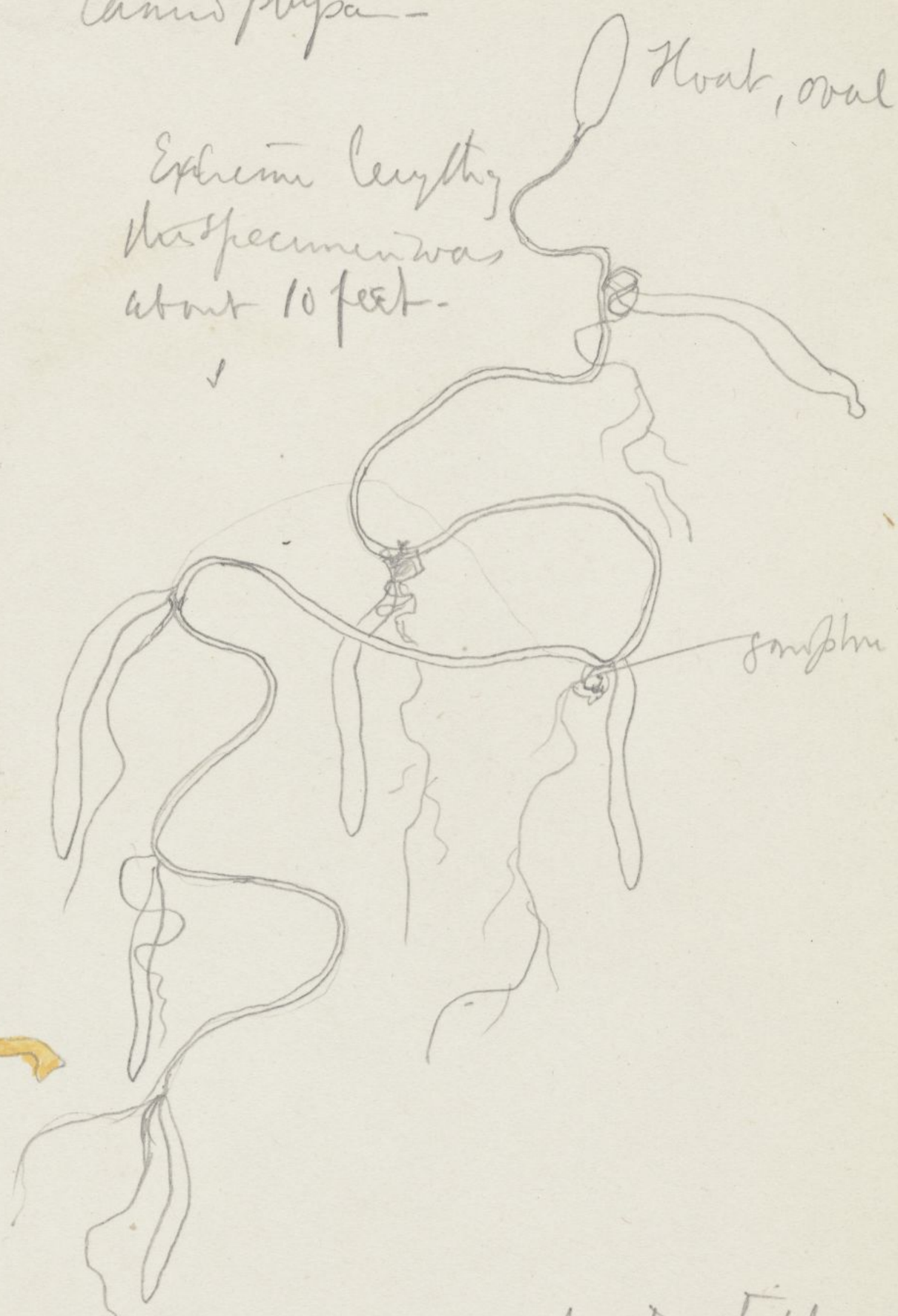
athorybia, Bottle 196.
colors from life
parts expanded -
tips of palpons
rather brighter
rose than in
sketch -
Cam complete -
+ 4 detached
bracts -
Bases of palpons
amber yellow
difficult to
imitate -
when put in formol
the palpons were
thrown off, but
siphons remain attached

Harvard University - Ernst Mayr Library of the Museum of Comparative Zoology / Bigelow, Henry Bryant. Drawings of siphonophores made on board the "Albatross," 1904-1905. Spec. Coll. Archives bMu 293.60.4. Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

Bottle no.
Came up on wire, 275 fms -
Cannophyra -



Extreme length this specimen was about 10 feet -



Siphons Distal ½ pale apple green, Tip varied to chrome yellow -

Core is colorless

These seem to be tentacles, but on the siphons which still have parts of tentacles attached no trace of them is to be seen -