Methods of Cataloguing

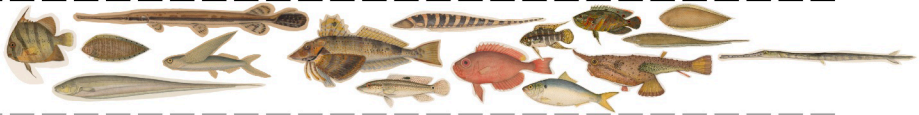
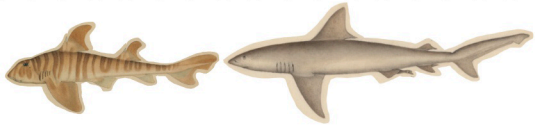
HyunJin Seo

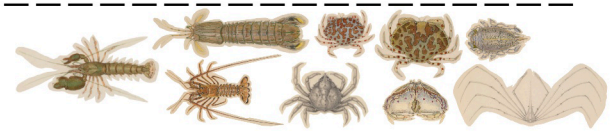
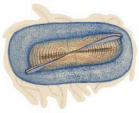
Jacques Burkhardt Scientific Drawings

Ephippus faber, 1 fish drawing (11 x 11 cm.)

Method of Cataloguing 1:

Taxonomia organisation of selected 72 drawings

Phylum	Class / subphylum	Order / Group (informal)	Common Name
Chordata	Actinopterygii		Fish 
	Chondrichthyes	Batoidea.	Ray, Stringray 
	Chondrichthyes	Selachimorpha	Shark 
	Amphibia	Anura	Frog 
	Reptilia	Crocodylia	Alligator 
	Reptilia	Squamata	Lizard, Snake 
	Reptilla	Testudines	Tortoise, Turtle 
	Mammalia	Cetacea	Dolphin 
Echinodermata	Asteroidea		Starfish 
	Ophiuroidea		Brittle star 

	Echinoidea		Echinoderms 
Arthropoda	Malacostraca	Decapoda	Crab, Shrimp, Lobster 
Mollusca	Bivalvia		Mussel, Clam 
	Gastropoda		Snail, Nudibranch 
	Cephalopoda		Mollusk (unspecified) 
Cnidaria	Hydroza		Hydroid 
			Amphibian (general / unclassified)

A lot of 'fishes' in fish category doesn't seem fish enough --> Catalouging them by the cladistic.

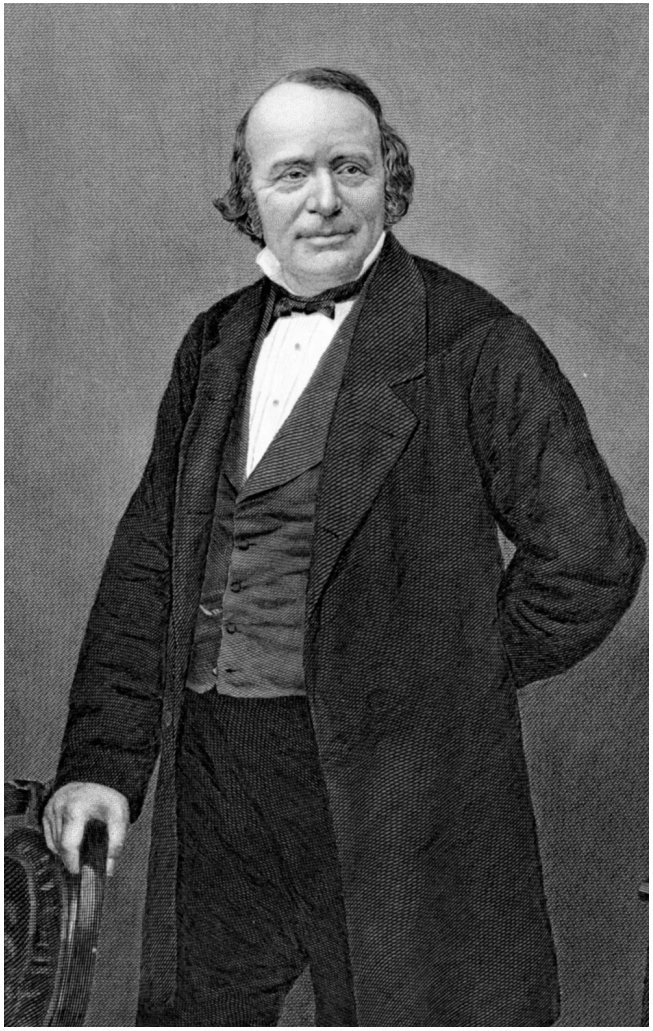
Method of Cataloguing 2:

They are all fish!

David Starr Jordan

(January 19, 1851 – September 19, 1931)

Ichthyologist who created the species ‘fish’.



Louis Agassiz

(May 28, 1807 – December 14, 1873)

Influential proponent of polygenism and his revulsion for African Americans and insistence on their inherent inferiority were well-documented.

This shows that the very foundation of this scientific classification system was intertwined with a belief in hierarchy and racial superiority.

Starting to wonder...

Purpose of this catalouge?

To investigate the distribution of Brazil's freshwater fish species. Agassiz's anatomical observations illustrate his focus on species differentiation in his study of Brazilian fish distribution.

But the relationship between the components of a catalogue can be shaped by the form of the catalogue itself.

The catalogues of Burkhardt's drawing focused on visibility and classification — clearly defining what counts as a fish and what does not.

How can I change the relationships between the items in the set? How can I experiment with new approaches to alter how the set is presented, circulated, or accessed?

What belief do I have in re-cataloguing?

*David Starr Jordan believed in **order** and **superiority,** while Burkhardt believed in **accuracy** and **observation**.*

I believe in **connection, emotion, inaccuracy,** and **vitality.** I catalogue not to classify, but to connect. My taxonomy is based on empathy rather than hierarchy.

Final Method of Cataloguing:

Anti-Taxonomic Subversion

Table1

# Column 1	Image	Name	Translated Annotation	Categorised	Language	quality of drawing	Uncertain?	Stamped	Specimen no.
1		Fistularia Tabacaria (Rio de Janeiro, Brazil, 2 June 1865)	Family: Fistularidae. Genus: Fistularia. Species: Fistularia marckgravii (Cast.) — [identified by] Louis Agassiz River Trombeta Rio, June 2, 1865 — J.B. (Jacques Burkhardt)	Fish	1. Fish family 2. Detailed fish species 3. Identified by: Agassiz 4. Where it was found 5. Drawer: Burkhardt	Pencil and watercolour. Not too rough and small detail drawing of other perspective has been drawn together.			
2		Plagusia	A bit longer, 19th-century scientific French with some idiosyncratic spelling (Burkhardt's handwriting and Agassiz's notes often mix French, Portuguese, and Latin). Family: Pleuronectidae. Genus: Plagusia. New species. There are two species of this genus: one has few bands and no spots, and its fins lack or have undefined markings. This one has very distinct bands. [identified by] Louis Agassiz. Common names: "Linguado" — "língua de vaca" — "língua de mulata." Rio de Janeiro, June 8, 1865. J.B. — Jacques Burkhardt.	Fish	1. Fish family + New species 2. A lot of detail treatment analysing its features. 3. Identified by: Agassiz 4. Common name listed 5. Drawer: Burkhardt	Pencil and watercolour. Not too rough and detailed drawing visualising its features.			
3		Ogcocephalus vespertilio (Rio de Janeiro, Brazil, 7 July 1865)	Family: Lophioid fishes. Genus: Malthe. Species: Malthe vespertilio. Malthe vespertilio — identified by Louis Agassiz. Family: Maltheidae (Agassiz's classification). "Morcego do mar" (Portuguese: "sea bat"). Rio de Janeiro, July 7, [1865]. Drawn by Jacques Burkhardt.	Fish	1. Fish family 2. Detailed fish species 3. Identified by: Agassiz 4. Where it was found 5. Drawer: Burkhardt	Pencil and Water colour. Very detailed drawing treatment.			
4		Yutachy	Yutachy, (James)	Fish	Non	Very rough. Letters erased			
5		Geophagus sp (Lago de Jose, Brazil)	Lake José Assu — Tupimambanas Row of small teeth on upper and lower jaws. [above/below top fish:] 18, 3 [upper right:] Longitudinal bands. [lower right:] Small Acará species; all young; pale in color. — Louis Agassiz	Fish	1. Where it was found 2. detail describtion of its feature. 3. Fin/rays count 4. detailed fish species 5. Colour 6. Drawer: Burkhardt	Very rough drawing with pencil and watercolour. Second pencil drawing of fish drew along.			
6		Cichlids (Lago Maximo, Brazil; 3 fish and 1 anatomical cross section)	Small Acará (cichlid) = Lago do Máximo – Tupinambaranas. Seven white (specimens), seven small Acarás. Possibly Coutinhoa? The base of the caudal fin is spotted. — Louis Agassiz.	Fish	1. Fish species name. 2. Area where it was found 3. description of its features. 4. Indentifier name: Agassiz	Rough drawing with pencil/water colour. Three same size but very distictive looking fish drew together.			
7		Sternopygus macrurus (Teffe, Brazil, 1866)	J. Burkhardt. 1866. Tefé. Three-quarters natural size. — Jacques Burkhardt.	Fish	1. Drawer name. 2. Date of recording. 3. Description of size 4. Drawer name.	A fish is drawn in the centre of the canvas, very small and thin looking. Detailed drawing style.			
8		Pogonopoma parahybae (Parahiba, Brazil, 22 May 1865)	Family: Goniodonts. Genus: Rhinelepis. New species. — Louis Agassiz Rhinelepis No. 4. Parahyba River. 22 May 1865. — Jacques Burkhardt.	Fish	1. Fish family 2. Group of fish 3. New species. 4. Indentifier: Agassiz 4. River where it was found 5. Date of collection/drawing 6. Drawer: Burkhardt	Rough yet distinctive colour of the fish well portrayed through drawing. Name of the fish and identifying scientist's name written big compare to artist's name.			

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10		Crenicichla lacustris (Rio Parahiba, Brazil, 27 April 1865)	Family: Chromids. Genus: Crenicichla. New species. No. 4. Crenicichla (Heckel). Purchased and presented by F. Billings. April 27, 1865. Rio Parahyba, below Barra de Parahy. — Louis Agassiz	Fish	1. Plate/Specimen number 2. Fish family Chromides = old term for Cichlidae 3. Name of fish 4. Species identified as New species 5. purchased and presented by F. Billings (Agassiz often noted private contributors). 6. Described by Louis Agassiz.	Somewhat detailed drawing, drawn centre of the old paper. Annotation written neatly each side corners of the paper.			
11		Gymnotus sp.	Sarapo (= Gymnotus), Gurupá, 23 August. 23 August. — Jacques Burkhardt.	Fish	1. Name of fish (Sarapo=Portuguese name for electric knifefish) 2. Plate/Specimen number, Gurupa = Town of Amazon river 3. Date (written in portugese) 4. Drawn by Burkhdart	Very rough drawing with pencil and water colour. Beautifully calligraphed name of the fish.			
12		Unidentifiable loricariid	49. Loricaria (not Hypostomus). Lake January, 29 October. There are two related species, one black one carrying eggs. The Hypostomus rest upon their eggs. — Louis Agassiz.	Fish	1. Name of fish but misreading 2. Distinguishing it from another armored catfiish genus. 3. Where and when it was found 4. Rare and early observation of parental care in loricariids	Very very rough drawing with pencil and water colour. Handwritting very hard to recognise and all of them drawn/written at the very corner of the paper.			
13		Priacanthus arenatus	Family of Percoids. Genus Priacanthus. [Crossed out: Unpublished species.] Priacanthus arenatus (Cuvier & Valenciennes). Labrus arenatus (Val.). Discolored specimen: Priacanthus arenatus Cuv. & Val. Priacanthus macrophthalmus Cuv. & Val. (not Bloch). The larger individuals are more reddish along the flanks. The affinities of this genus with the Serrans (of the Percoid family) seem doubtful. Compare with Priacanthus boops from St. Helena and Priacanthus bonaricssin from Buenos Aires.—Louis Agassiz "Olho de cão" (Dog-eye fish) — Rio, 8 June 1865. J.B.—Jacques Burkhardt	Fish	1. Fish family 2. Unpublished species (has been crossed out) 3. Name of fish (area found) 4. Larger species, reddish. 5. Comparing with other fish by Agassiz 6. 'Dog eye fish' - Where and when it was found by Burkhardt	Somewhat detailed drawing, drawn centre of the old paper. Annotation written neatly each side corners of the paper. Some words crossed out.			
14		Laetacara curviceps	Lake José Assu, 29 August. "Pleurogramma." —Louis Agassiz Acará. Compare No. 1 and No. 2.	Fish	1. When/where it was found 2. "Pleurogramma." - Agassiz named it like this before he knew it was Laetacara Curviceps. 3. Comparing it with other specimens	Very rough pencil/water colour drawing with irregular paper size. Fonts bigger than the fish.			
15		Two echinoderms	Drawn by Burkhardt, 1837 — Jacques Burkhardt	echinoderms	1. who/when it drawn - Burkhardt	Very detailed pencil and watercolour black and white drawing of echinoderms. Two different types drawn next to each other. Very small annotation.			

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29		Cistudo (side view)	Variety of the garden Cistudo. J.B. — Jacques Burkhardt.	Turtle	1. Stating it was collected from a live specimen kept at the Cambridge garden/zoological yard. “variety” suggests Agassiz or Burkhardt was observing morphological variation within the Cistudo group. 2. Drawer name: Burkhardt (marked with inital)	Detail drawing of the side view of turtle using pencil and water colour. Indented colourless Agassiz stamp, stamped randomly on the paper on the blank spot.			
30		Kinosternon scorpioides (bottom view)	Like the Kinosternon marianum (three views). Kinosternon scorpioides. From Surinam, from Herins — Louis Agassiz Jacques Burkhardt, 1856.	Turtle	1. Comparing with other turtle 2. Turtle name 3. Where is was found 4. Identifier Agassiz 5. Drawn by Burkhardt	Somewhat detail bottom view drawing of the turtle with pencil/watercolour. Indented colourless Agassiz's stamp, stamped randomly on the blank spot of paper. Notes written rougly			
31		Chelys fimbriata (side view)	Js. Burkhardt Cambridge 7 Mars. 1863.--Burkhardt, Jacques Chelys fimbriata Amazon Riv. J.C. Hitchens--Agassiz, Louis	Tortoise	1. Drawer's name: Burkhardt 2. Collected/drawn date 3. Drawer's name: Burkhardt 4. Name of tortoise 5. Found river: Amazon 6. Identifier name: Agassiz	Very detailed side view drawing of tortoise using pencil annd water colour. Eye's were drawn separtely with pencil on the side enlarged. Indented colourless Agassiz's stamp, stamped randomly on the blank spot of paper.			
32		Tortue terrestre	Grande Tortue terrestre face & [illegible]--Agassiz, Louis Js. Burkhardt 1856.--Burkhardt, Jacques	Tortoise	1. Turtle name and description of main features. 2. Illegible text and identifier name: Agassiz 3. Drawer's name: Burkhardt (marked with initial) 4. Found/drawn year 5. Drawer name	Very detailed side view drawing of turtle using pencil annd water colour. Very detail drawing of the face. Indented colourless Agassiz's stamp, stamped randomly on the blank spot of paper. Special shadow threatment, showing the light.			
33		Two mollusks (Nantucket, Mass.?)	Nantucket?--Agassiz, Louis [upside down:] B959W5 #2	Mollusk	1. Uncertain name 2. Identifier name: Agassiz 3. Upsided down written specimen number	Very detailed front view drawing of mollusk using pencil annd water colour. Top view drawing roughly with pencil showing uncerntainty. Question mark?			
34		Crepidula (Boston, Mass., March 1847)	Crepidula. Boston.--Agassiz, Louis March 47--Burkhardt, Jacques	Snail	1. Name of the snail 2. Found area 3. Identifier name: Agassiz 4. Drawn date 5. specimen number 6. Drawer name: Burkhardt	Somewhat detail drawing of the snails. Rough sketch of the snail on the side. All three snails drawn one by one landscape in orderly way.			
35		Eight mollusk drawings	JB Nahant 1864--Burkhardt, Jacques	Mollusk	1. Drawer name: Burkhardt (marked with initial) 2. Artwork creation location 3. Artwork year 4. Drawer name	One very detail drawing of the mollusk and seven other rough drawing of the mollusk. Mollusk dispersed on the paper like if they are moving in one space. Very roughly written words.			

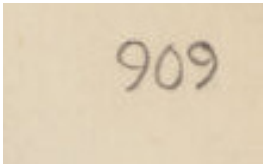
What i noticed...

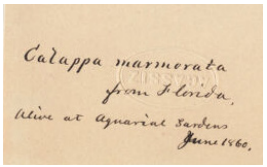
After examining each one closely (both visually and linguistically), I found the following characteristics.

The act of dividing all 62 specimens into fixed species — an act of confinement:

- Specimen number
- Stamp
- Very detailed drawing (visual control)
- Classification (linguistic control)

Notes: Agassiz classifies and names specimens and stamps his name on the page. Specimen numbers are assigned. The drawings are extremely detailed — they feel like studies of animals that were captured, not drawn from living subjects.

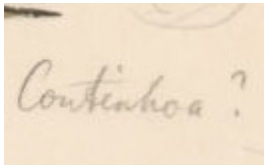




The act of not dividing the 62 specimens into fixed taxa — an act of release:

- Incomplete drawing (visual liberation)
- Question marks? Unidentified (linguistic destruction)

Notes: forms of shaky, roughly sketched drawings; unidentified species; question marks written next to species names.



Critical design thinking...

Burkhardt's authority as a designer: Visual precision — the way accuracy objectifies knowledge and makes it his to own.

My authority and belief as a designer: Dismantling that 'objectivity' through linguistic intervention, and in collapsing hierarchical thinking by refusing classification. My re-cataloguing is a simulation of anti-colonial knowledge practices.

So — how do I set all this knowledge free again, pour it back into the ocean, and dissolve hierarchy?

Make every specimen impossible to recognise at a glance!

Hybridize them so that even when people look at the drawings they can't tell what species they're seeing; make the annotations unreadable as taxonomy.

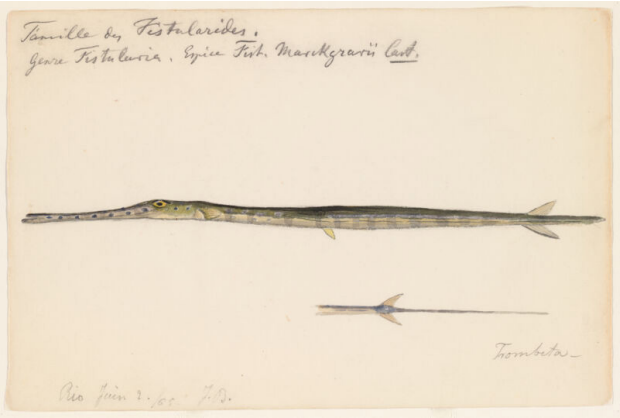
Because taxonomy is a language of power, I will destroy systematic language and demolish classification so that everything becomes simply one unclassifiable 'fish' (after all, "fish" as a category never truly existed).

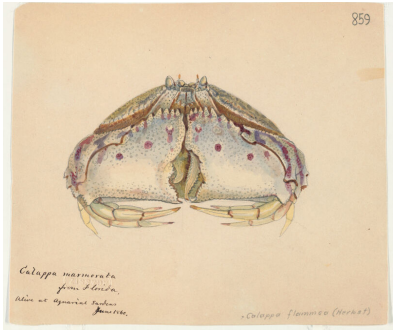
Let them live happily undivided!

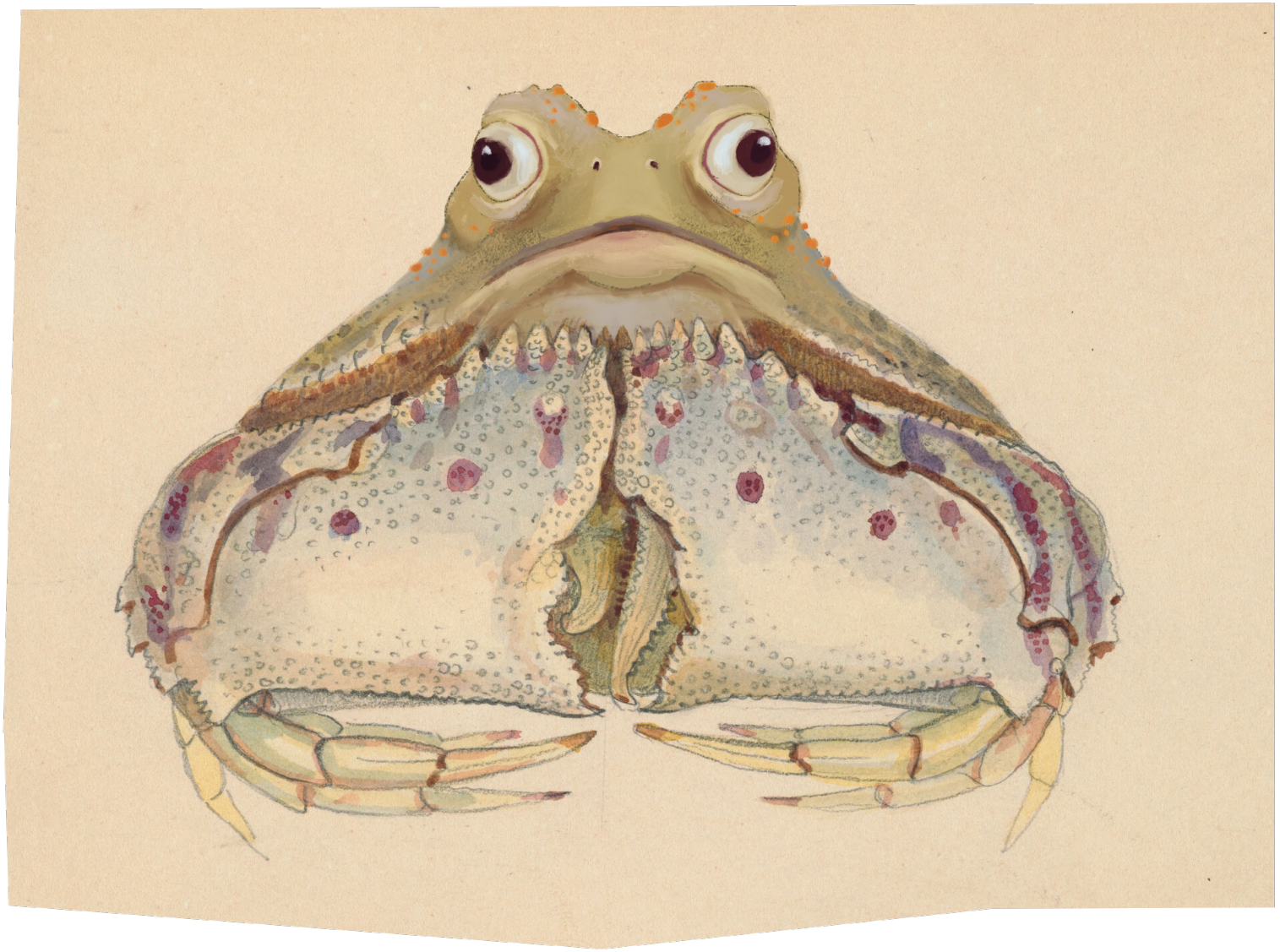
To do list:

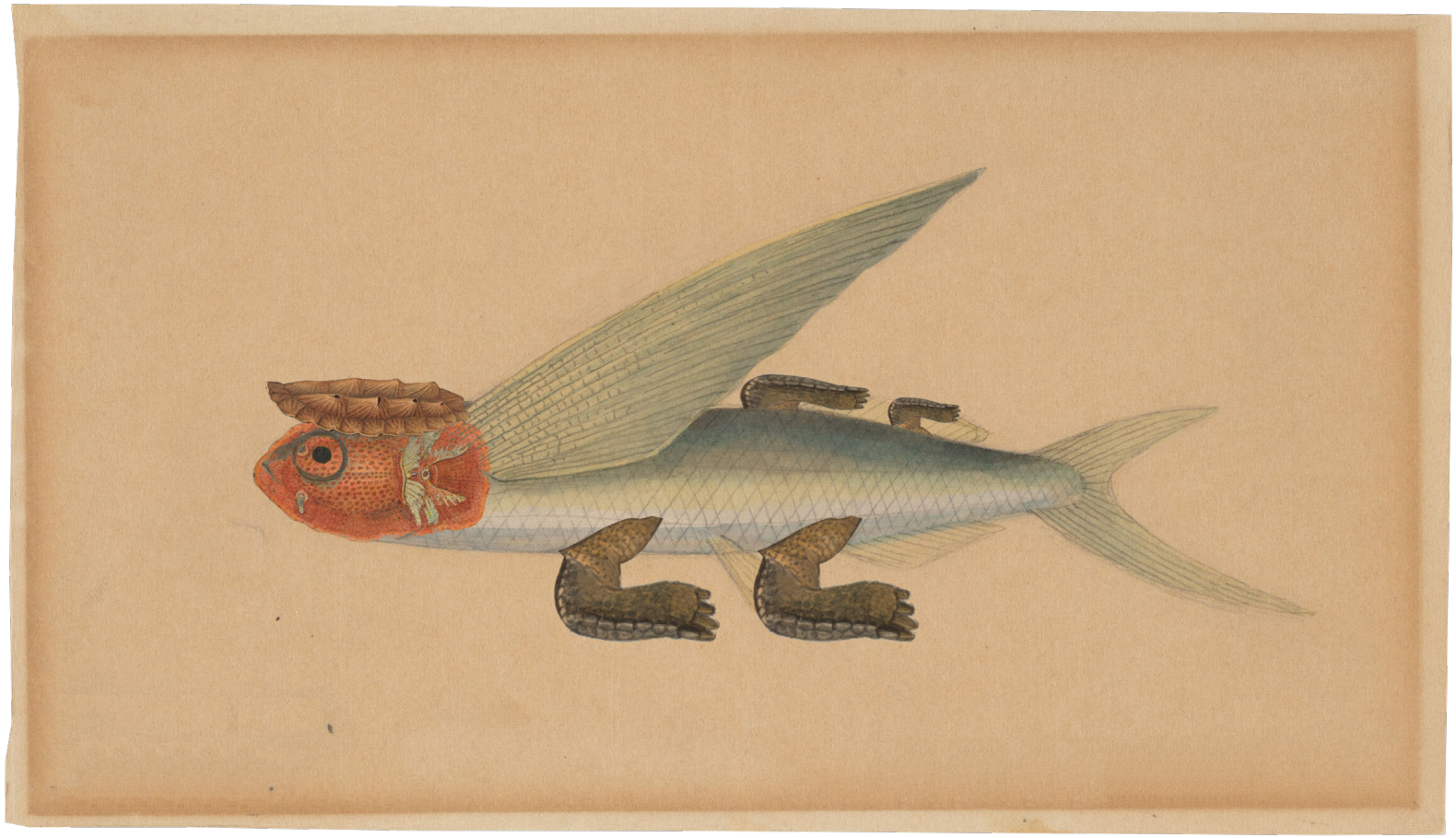
- Turn every species into a 'Fish' - No names, Yes hybrid.
- Some creaturea swam off mid-drawing — unfinished, tentative (sometimes leaving an entirely empty canvas).
- Elements confined specimens — stamps, names, specimen numbers — and bind them together into a single 'fish' (why? to erase ownership and fixed identity).
- Make David Starr Jordan and Agassiz into hybrids too.
- Then build a website like the Harvard Digital Collections to catalogue this work — but instead of a "perfectly ordered" volume of knowledge, present it as a ocean website releasing the fishes back into the water.

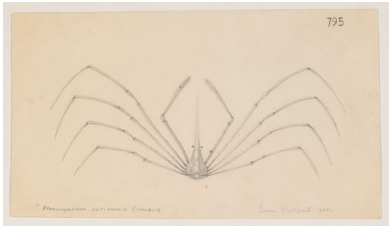
1. They are all fish.

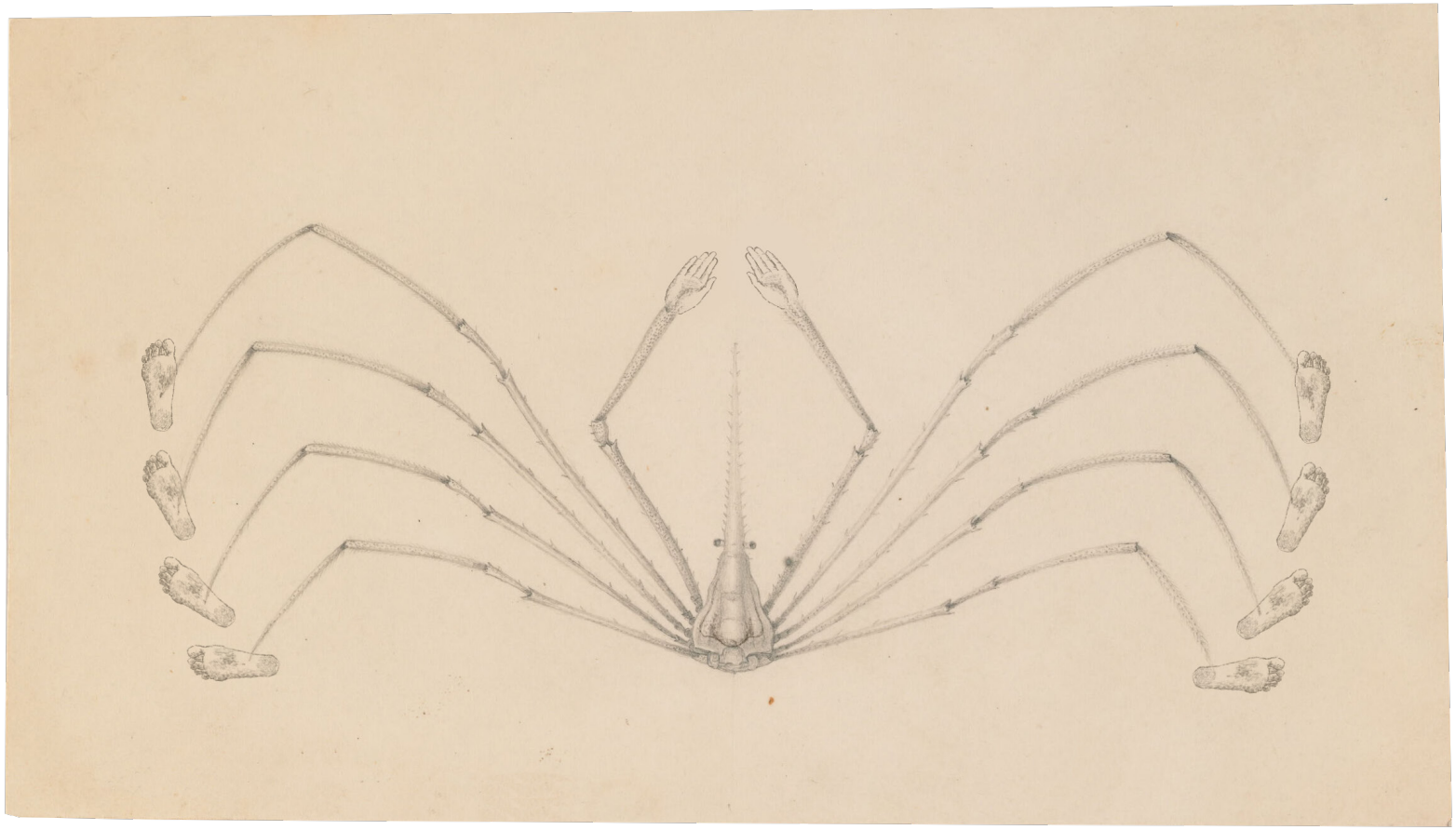


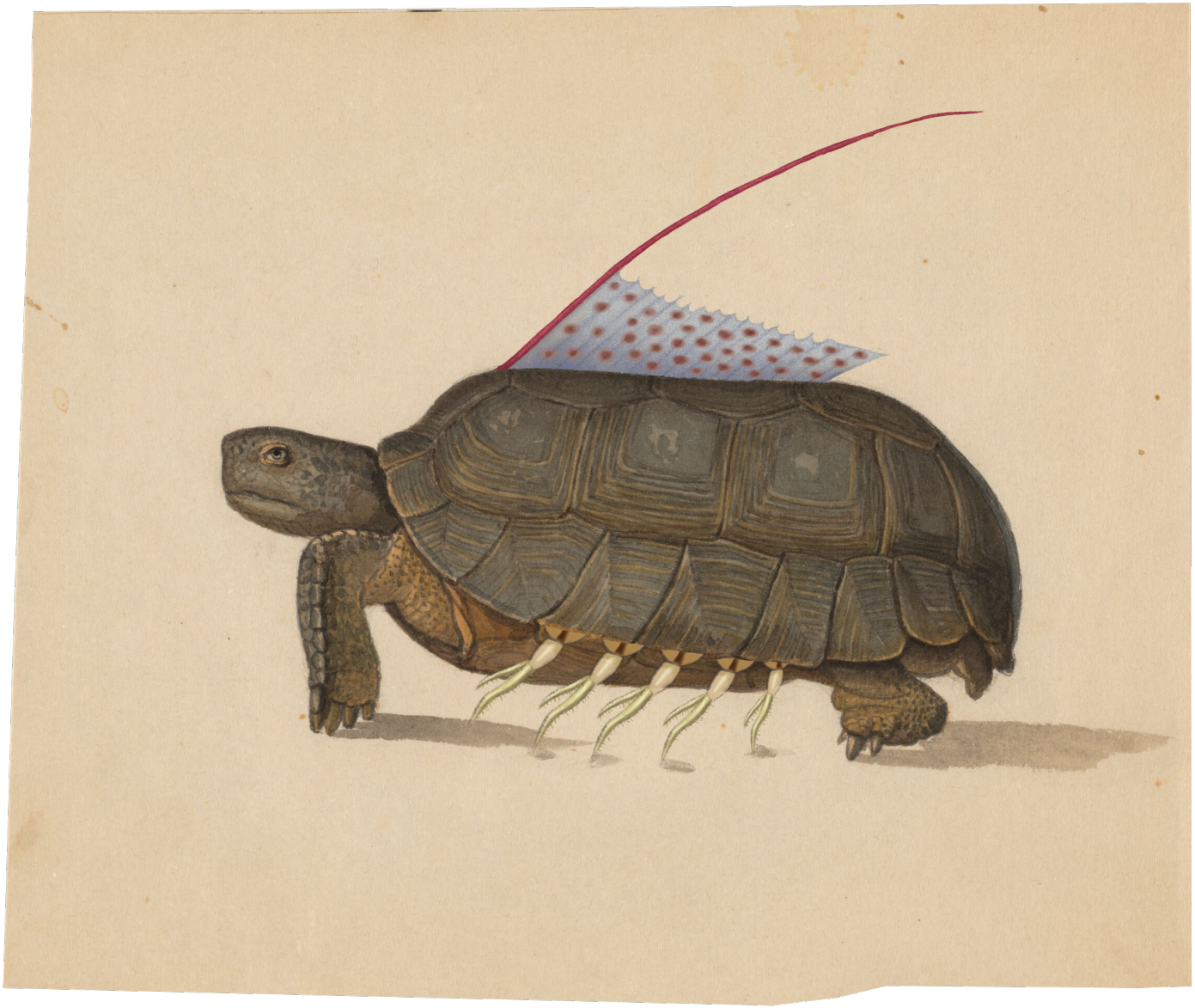

859
Calappa marmorata
from Florida
Calappa flammea (Herbst)







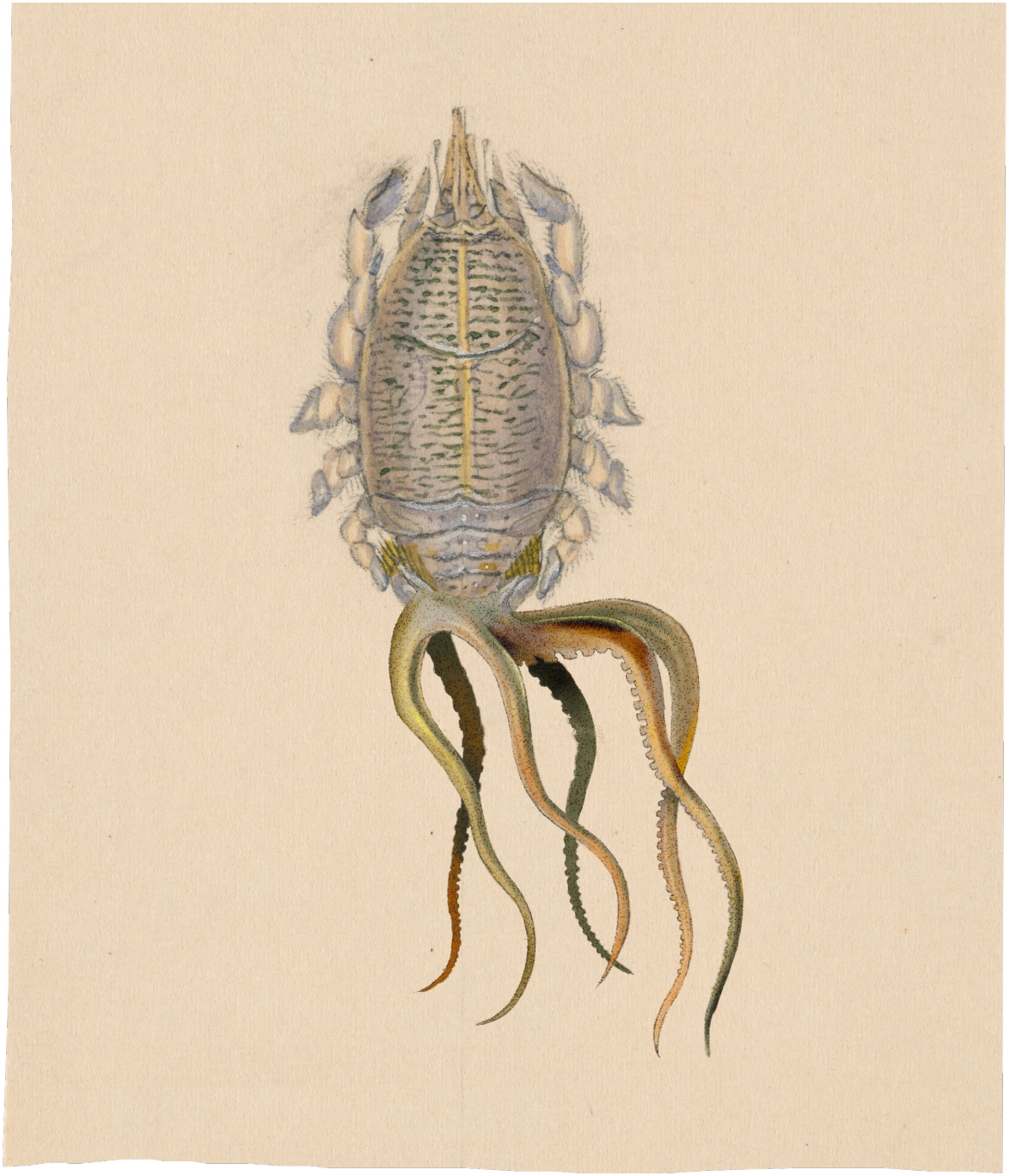


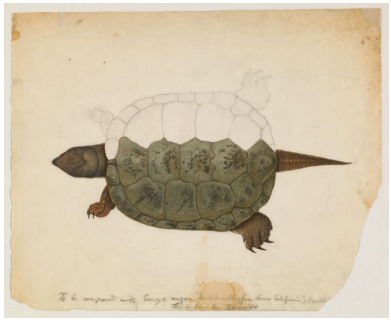


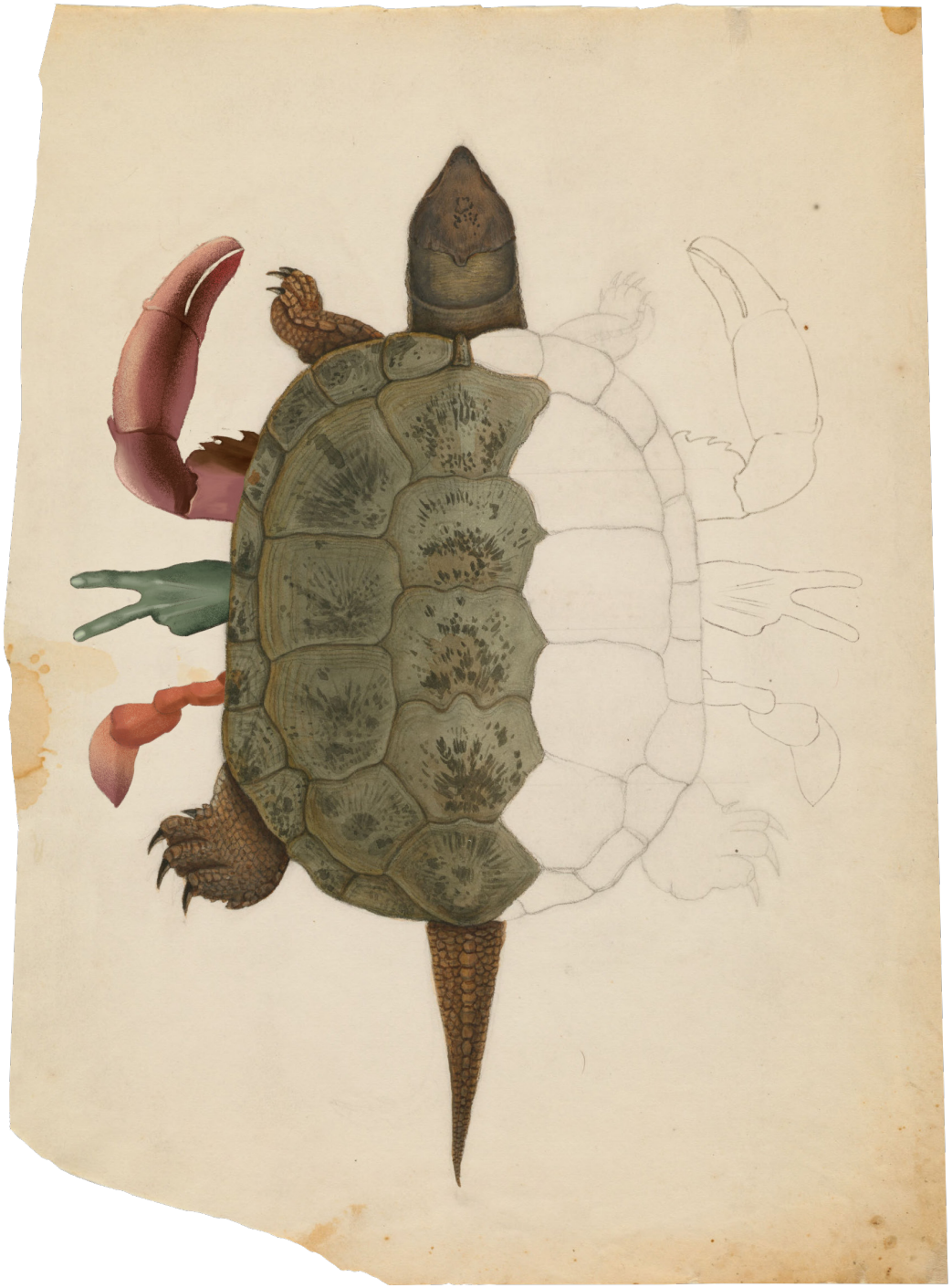
871

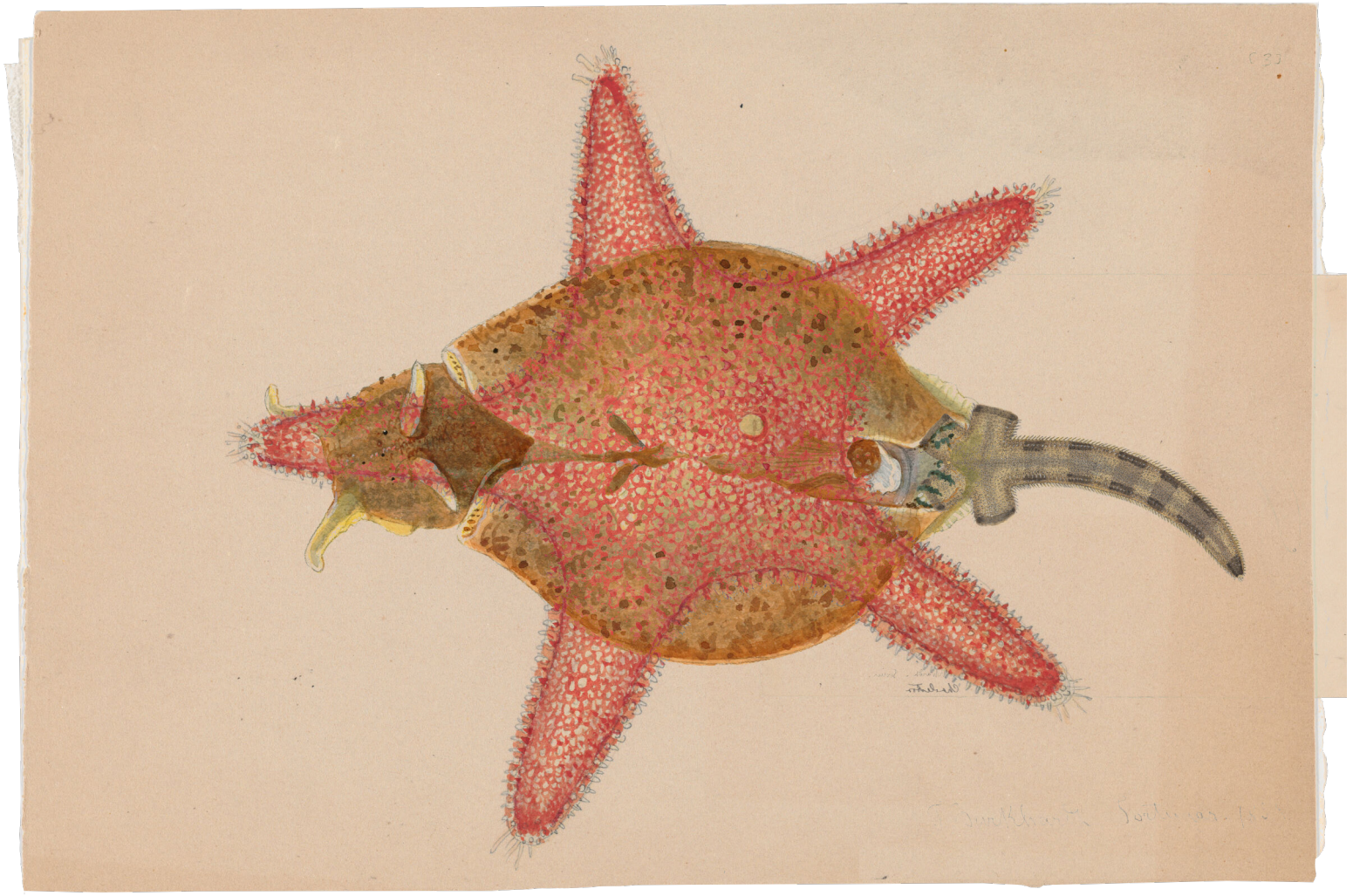
> Emerita talpoida (Say)

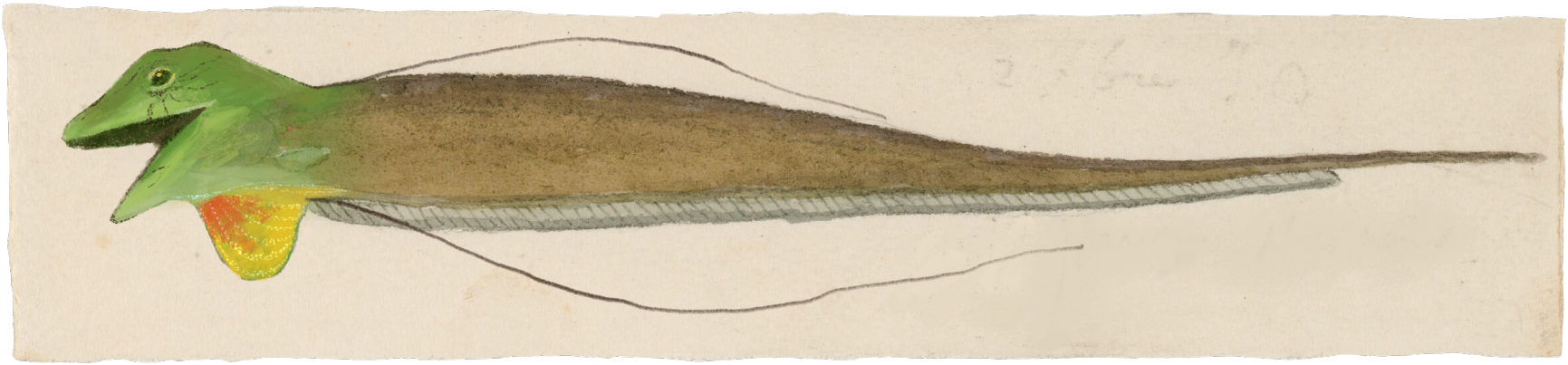
T. Burkhardt



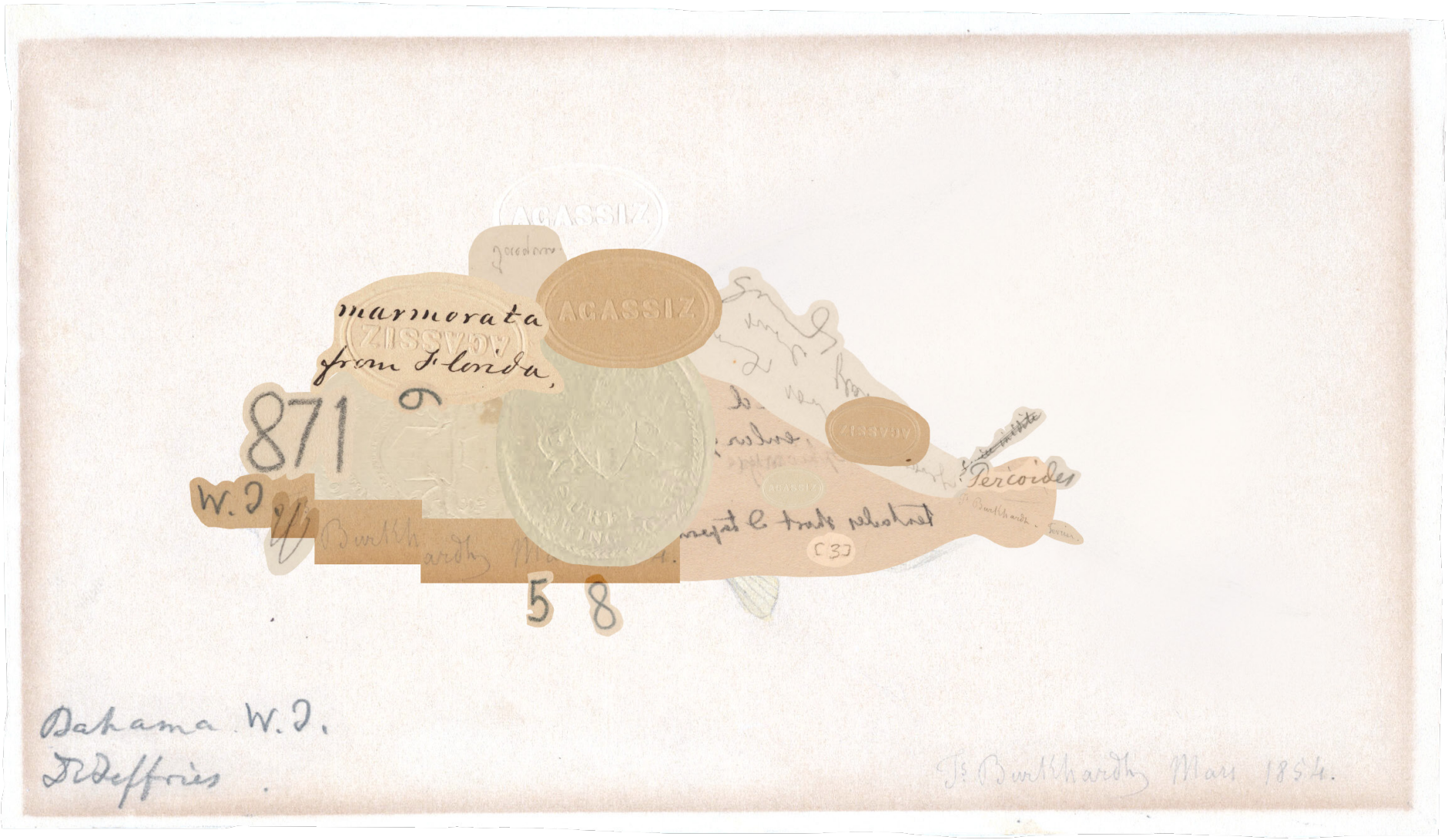




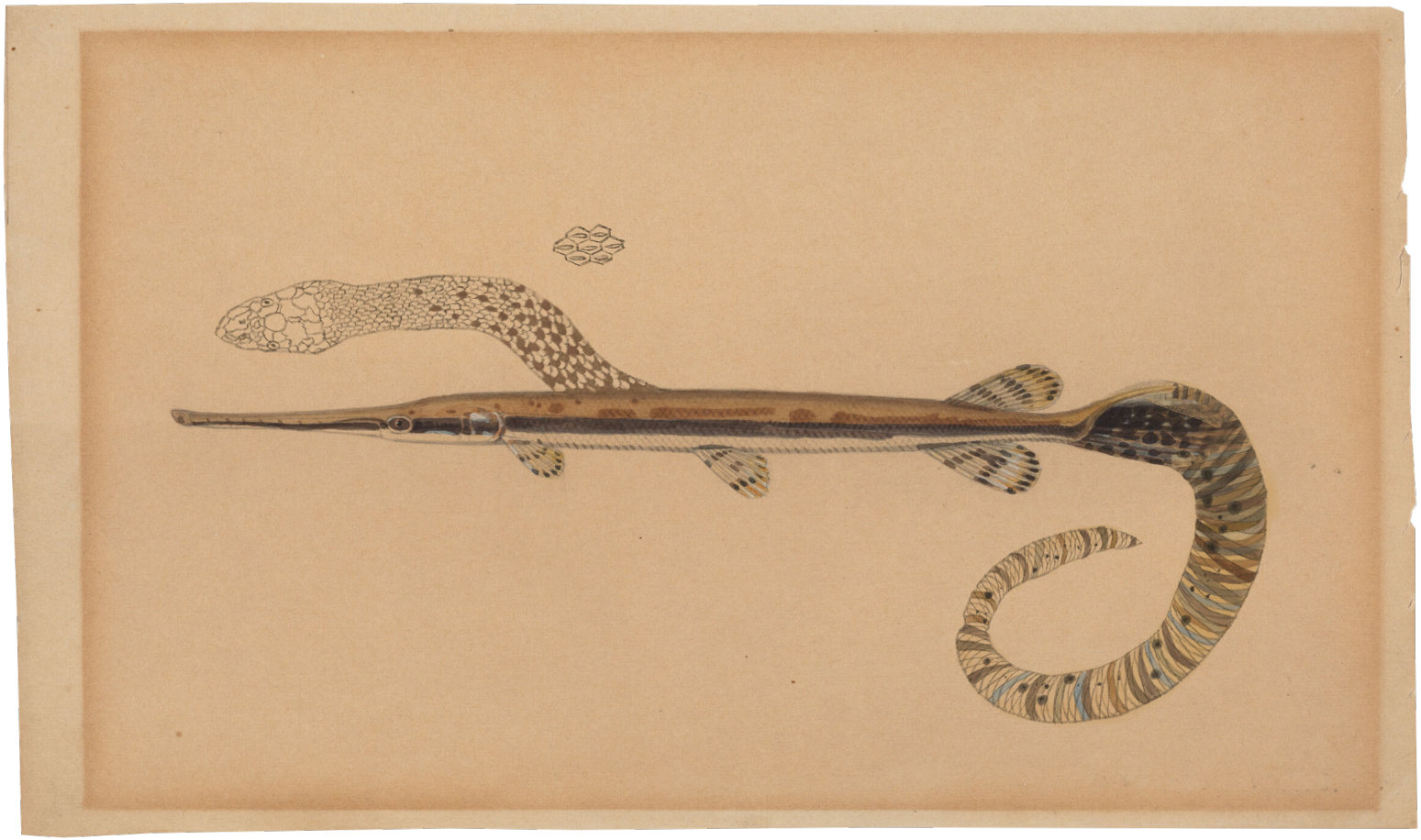




2. Annihilation of Ownership



3. Unfinish...



Famille des Percoides.

genre Priacanthus, ~~espèce inédite~~.

Priac. cruentatus CuvVal

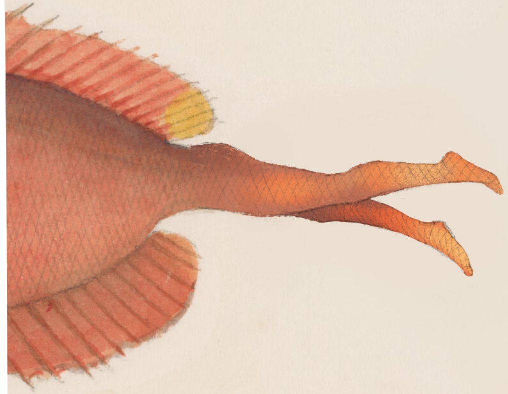
Labrus cruentatus Val.

Esp. décoloré: Pr. arenatus CuvVal.

Pr. macrophthalmus CuvVal (non Bloch)

Les grands sont plus rouges sur les flancs

Les affinités de ce genre avec les Serrans de la famille des Percoides me paraissent douteuses.

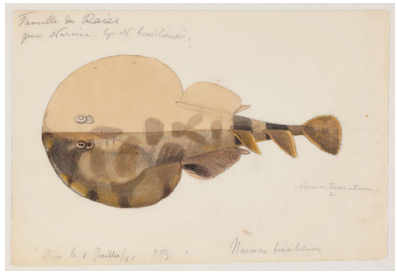


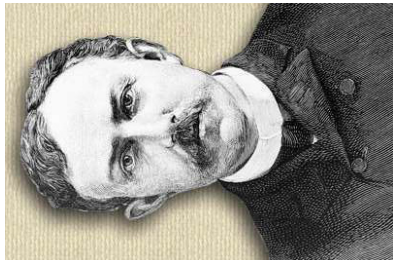
Olho de cão

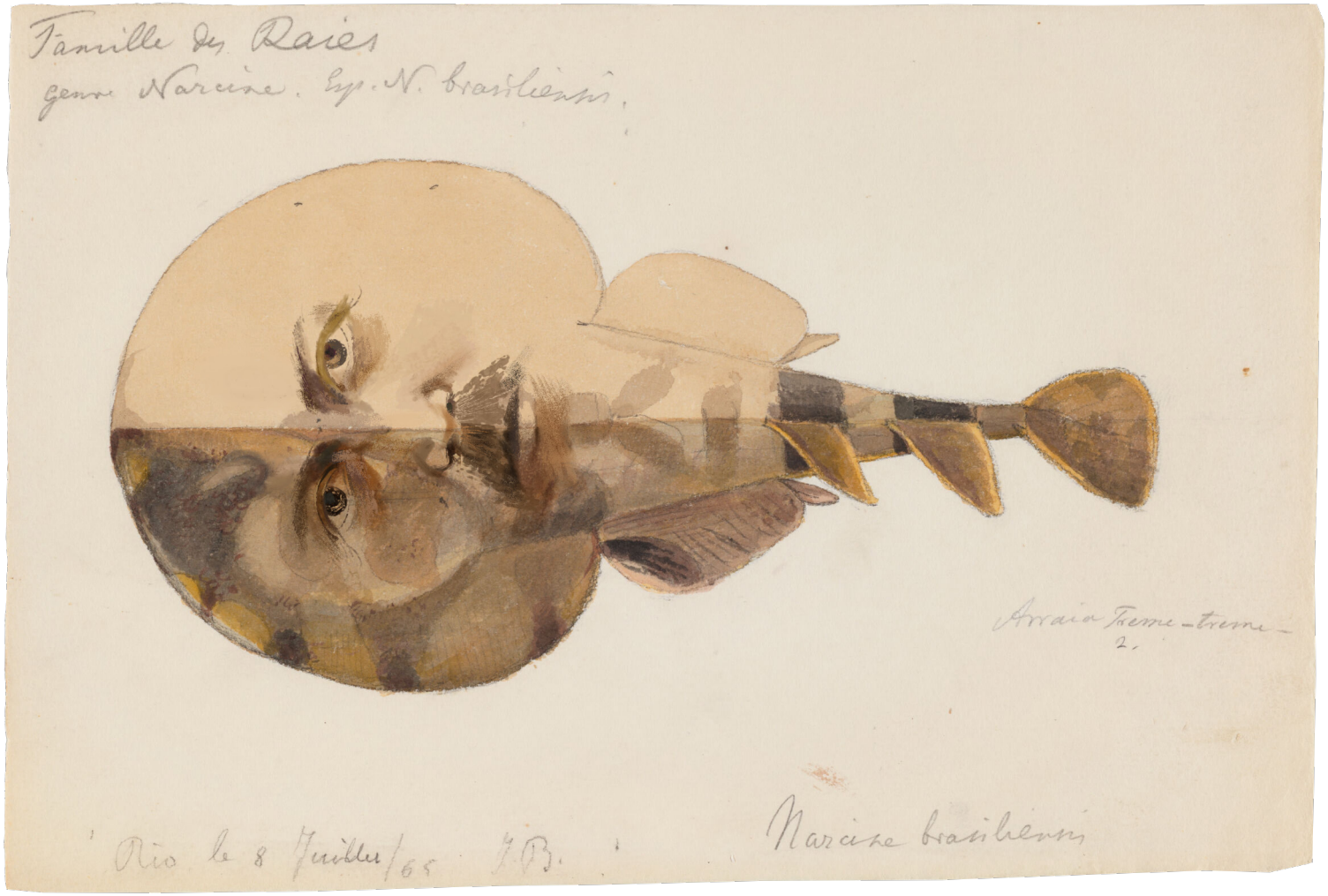
To compare with Pr. boops from St Helena & Pr. bonariensis fr Buenos-Ayres,

Rio 8 Juin /65 JB.

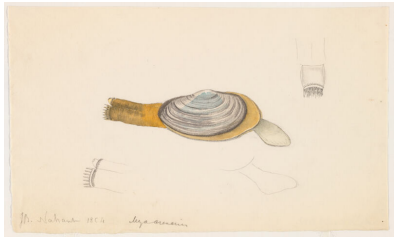
4. David Starr Jordan. *You are also fish...*

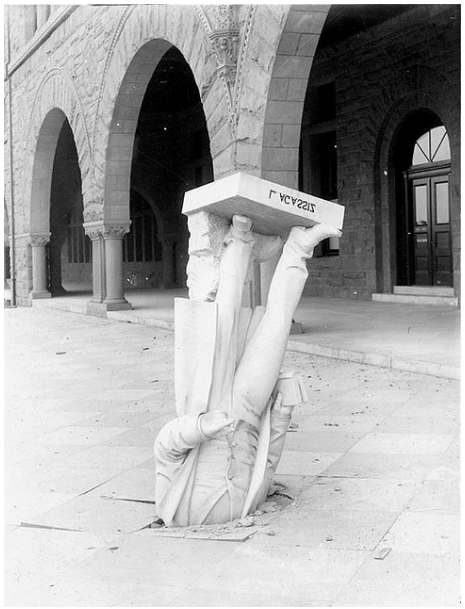


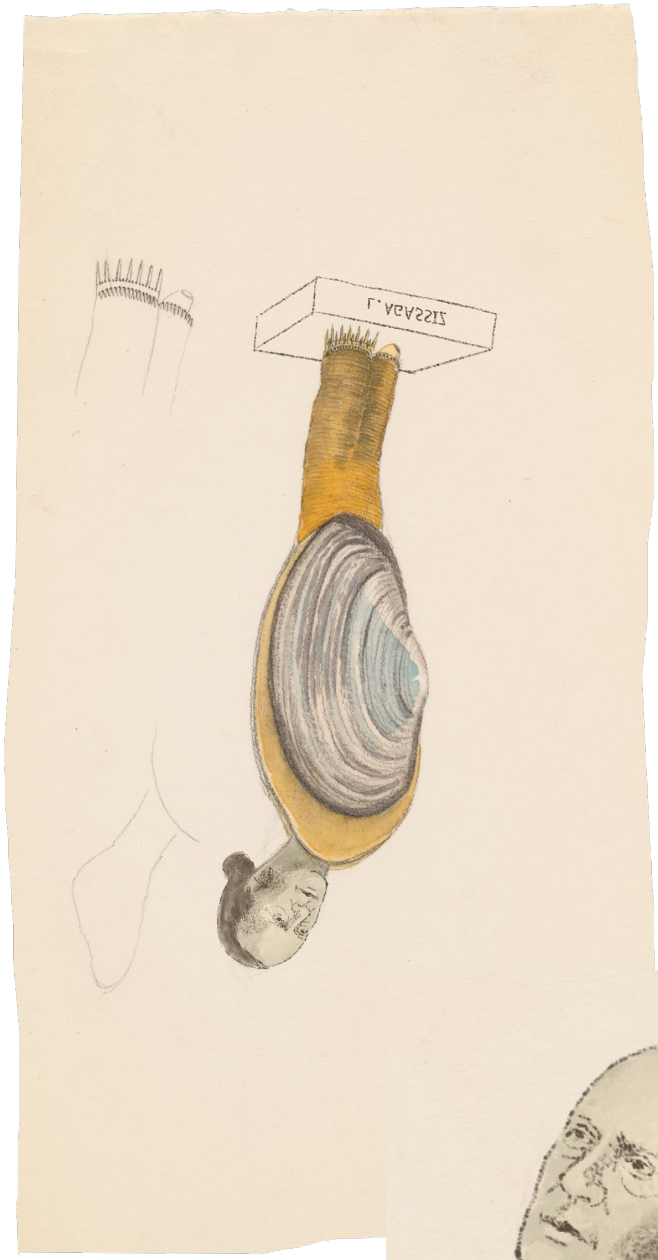


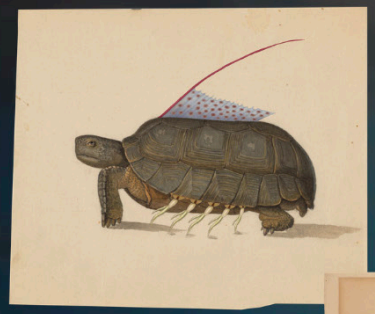


So are you Agassiz...





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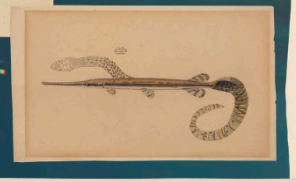
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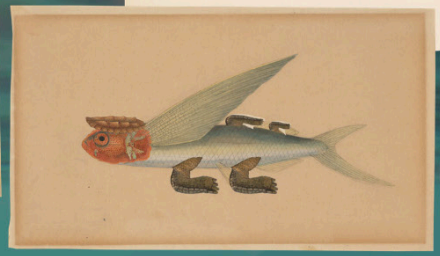
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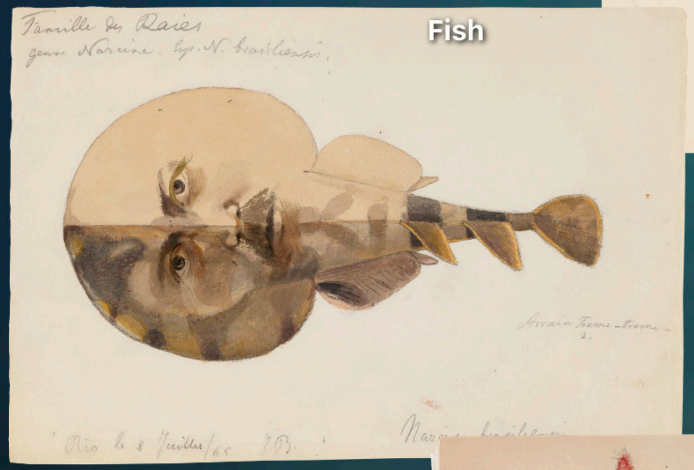
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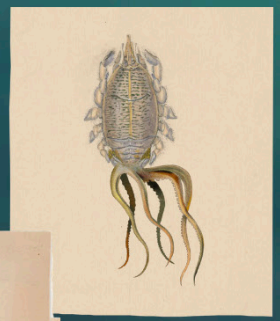
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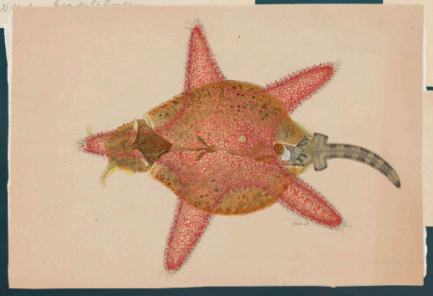
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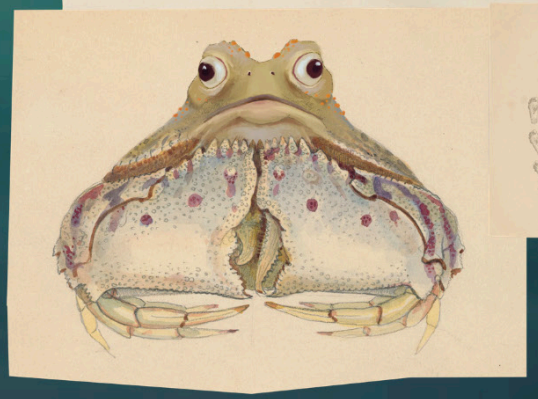
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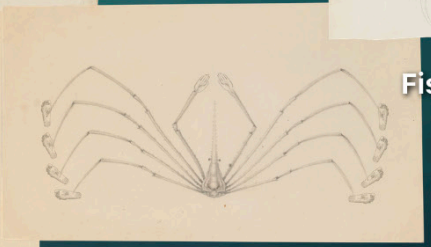
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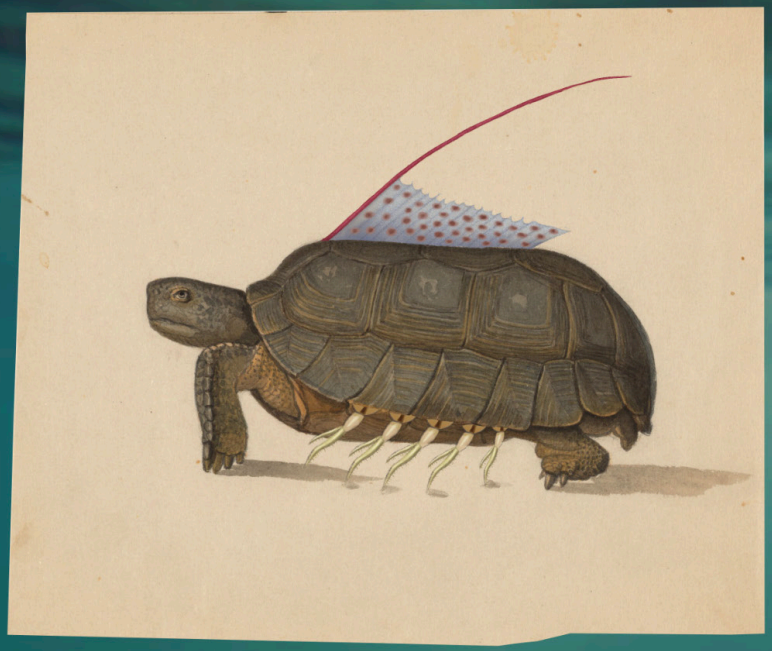
Fish

Fish



SPECIMEN NO.	[REDACTED]
RE-CAT. NAME	Unidentified
FREEDOM STATE	Escaped from Classification. Observed Status: Happy.
RESISTANCE LEVEL	High & Fluid.
CIRCULATION METHOD	Re-circulated into the Water/Web. Access: Transient.