ZOOLOGY.—New western Atlantic records of octocorals (Coelenterata: Anthozoa), with descriptions of three new species. Frederick M. Bayer, U. S. National Museum.

During the course of preparing a résumé of the octocoral fauna of the Gulf of Mexico for the symposium being assembled by Dr. Paul S. Galtsoff, a number of new western Atlantic records of these animals came to light. They materially increase our knowledge of the Gulf octocoral fauna, and also provide more material for determining the origin and relationships of the Gulf fauna. These records, which include stations outside of the Gulf proper as well as within it, are presented in the following list. The bulk of the collection was made by the U.S. Fish Commission steamer Albatross, but substantial parts were also contributed by the steamers *Pelican* and *Fish Hawk*, and by the Gulf Expedition of the University of Miami.

Data for the *Albatross* stations cited below are given in a station-list on page 188. All data for other vessels and collectors are in the text.

Order TELESTACEA
Family Telestidae

Telesto favula Deichmann, 1936

South of Mobile, Ala., from *Albatross* stations 2387, 2388, 2389, 2390.

#### Telesto sanguinea Deichmann, 1936

Off Palm Beach, Fla., 20–30 fathoms, April 1950: m/v *Triton*, Thompson and McGinty. (Previous northernmost record: Carysfort Reef, off Key Largo.)

Off Fort Walton, Fla., 13–14 fathoms, June 3–4, 1947: Frank Lyman.

ESE. of Destin, Fla., 13–14 fathoms, July 29–30, 1948; L. A. Burry and Frank Lyman.

South of Cape St. George, Fla., Albatross station 2405.

South of Cape San Blas, Fla., Albatross station 2370.

South of Mobile, Ala., *Albatross* station 2387. (Previous northernmost record within the Gulf: west of the Dry Tortugas.)

Order ALCYONACEA
Family ALCYONIDAE

Nidalia occidentalis Gray, 1835

63 miles ESE. of Charleston, S. C., Pelican

station 195–7: 31° 50.5′ N., 79° 26.5′ W., 45 fathoms, March 13, 1940.

Off Palm Beach, Fla., 20–40 fathoms, February and April 1950: m/v Triton, Thompson and McGinty.

Family Nephthyidae Eunephthya nigra (Pourtalès, 1868)

Off Brunswick, Ga., to off Fernandina, Fla, from *Albatross* stations 2415, 2416, 2667, 2668, 2669. (Not previously recorded north of the Florida Keys.)

Off Daytona, Fla., Albatross station 2661.

Neospongodes portoricensis (Hargitt, 1901)

Off Havana, Cuba, from Albatross stations 2156, 2160, 2168, 2323, 2333. (Previously recorded only in the West Indies, from Puerto Rico southward and eastward.)

Order GORGONACEA Suborder Scleraxonia Family Briareidae

Diodogorgia nodulifera (Hargitt, 1901)

Off Palm Beach, Fla., 20–60 fathoms, January–April 1950: m/v Triton, Thompson and McGinty.

Iciligorgia schrammi Duchassaing, 1870

Off Palm Beach, Fla., 20–40 fathoms, March, April, and July 1950: m/v *Triton*, Thompson and McGinty.

Triumph Reef, off Elliott Key, Fla., 20–25 fathoms, November 28, 1949: University of Miami Marine Laboratory m/v Megalopa, F. M. Bayer.

Off Havana, Cuba, from Albatross stations 2157, 2166, 2324, 2334.

Suborder Holaxonia Family Acanthogorgiidae

Acanthogorgia aspera Pourtalès, 1867

Off Fernandina, Fla., Albatross station 2415. (Not previously recorded north of Havana.)

Family Muriceidae

Bebryce cinerea Deichmann, 1936

Off Cat Cay, Bahamas, 100-150 fathoms,

<sup>1</sup> Published by permission of the Secretary of the Smithsonian Institution. Contribution no. 69 from the Marine Laboratory, University of Miami. June 1947: Mr. and Mrs. John Wentworth. (Not previously recorded north of the Virgin Islands.) Off Havana, Cuba, Albatross station 2327.

#### Bebryce grandis Deichmann, 1936

35 miles east of Pass à Loutre, La., *Pelican* station 12: 29° 11′ N., 88° 17.5′ W., 94.5 fathoms, February 5, 1938.

Arrowsmith Bank, south of Cozumel Island, east coast of Yucatán, *Albatross* station 2354. (Previously recorded from Montserrat and the Barbados.)

#### Muricea laxa Verrill, 1864

Off Havana, Cuba, Albatross station 2326.

Off Anclote Keys, Fla., Fish Hawk station 7806: Anclote Light E. 1/8 S., 14 miles, 8.5 fathoms, January 11, 1913.

SW. of Cedar Keys, Fla.,  $28^{\circ}\,42'\,\mathrm{N.}, 83^{\circ}\,30'\,\mathrm{W.},$ 

10 fathoms, 1887: Lt. J. F. Moser.

SE. of Jamaica, Albatross station 2138: 17° 44′ 05″ N., 75° 39 00″ W., 23 fathoms, February 29, 1884. (Heretofore recorded from "Florida," the Barbados, and as M. pendula Riess not Verrill, from Arrowsmith Bank, Yucatán.)

## Muricea pendula Verrill, 1868

8 miles W. by N. of Laguna Beach, Fla., 30° 16′ N., 86° 04′ W., 10 fathoms, October 24, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

South of Marsh Island, La., Oregon station 295: 28° 41′ N., 91° 49′ W., 17.5 fathoms, April 4,

1951.

(Previously recorded only from the type locality: Charleston, S. C. The record given by Riess does not deal with this species but with *M. laxa* Verrill, vide supra.)

### Placogorgia mirabilis Deichmann, 1936

Arrowsmith Bank, south of Cozumel Island, east coast of Yucatán, *Albatross* station 2354. (Previously known only from the type locality: Dry Tortugas, Florida.)

#### Scleracis guadalupensis (Duchassaing and Michelotti, 1860)

Off Palm Beach, Fla., 10?–40 fathoms, May, August 1950: m/v Triton, Thompson and McGinty (2 lots). (Not previously recorded north of the Florida keys.)

SSE. of Mobile, Ala., *Pelican* station 136–5, between 29° 38′ N., 87° 39′ W. and 29° 30′ N.,

87° 32.5′ W., 21–45 fathoms, March 1, 1939. (Previous northernmost record in the Gulf: NW. of Dry Tortugas.)

#### Swiftia casta (Verrill, 1883)

SSW. of Marsh Island, La., *Pelican* station 94–1: 28° 27′ N., 92° 14′ W., 29 fathoms, November 13, 1938. (Not previously recorded from the northern Gulf.)

#### Swiftia exserta (Ellis and Solander, 1786)

Off Fernandina, Fla., Albatross station 2666. Off Palm Beach, Fla., 30–40 fathoms, August 1950: m/v Triton, Thompson and McGinty.

Off Triumph Reef, Elliott Key, Fla., 20–25 fathoms, November 28, 1949: University of Miami Marine Laboratory m/v Megalopa, F. M. Bayer.

Tongue of the Ocean, off Green Cay, Bahamas,

Albatross station 2651.

SSE. of Mobile, Ala., *Pelican* station 136–4: 29° 38′ N., 87° 39′ W., 21 fathoms, March 1, 1939. (Not previously recorded from the northern Gulf.)

## Swiftia koreni (Wright and Studer, 1889)

Off Fernandina, Fla., Albatross station 2415. (Apparently not before recorded so far north in the western Atlantic.)

## Thesea plana Deichmann, 1936

8 miles W. by N. of Laguna Beach, Fla., 30° 16′ N., 86° 04′ W., 10 fathoms, October 24, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

South of Galveston Tex., *Oregon* station 537: 28° 06.2′ N., 99° 44.6′ W. 30 fathoms, April 15, 1952.

#### Family PLEXAURIDAE

#### Eunicea succinea (Pallas, 1766)

Off NW. end of St. Martins Reef, Florida Banks (south of Cedar Keys), 28° 50′ N., 83° W, 1887: Lt. J. F. Moser.

#### Plexaura dubia Kölliker, 1864

14 miles west of Cape Romano (Florida) whistle buoy 16, 25° 40′ N., 81° 55′ W., 7½ fathoms, September 28, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

## Plexaura porosa (P. L. S. Müller, 1775)

10 miles NW. by N. of New Pass (Florida) buoy, 27° 25′ N., 82° 45′ W., 5.5 fathoms, September 24, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

### Plexaurella kunzei Kükenthal, 1924

14 miles west of Cape Romano (Florida) whistle buoy 16, 25° 40′ N., 81° 55′ W., 7¾ fathoms, September 28, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

#### Family Gorgoniidae Antillogorgia acerosa (Pallas, 1766)

NW. of Charlotte Harbor, Fla., Fish Hawk station 7796: Boca Grande Light NNE. \(\frac{3}{8}\) E., 24.5 miles, to NE. \(\frac{1}{4}\) W., 20 miles, 7 fathoms, January 2, 1913.

Southeast of Arcas Keys, Gulf of Campeche, Oregon station 436: 20° 07′ N., 91° 41.2′ W., 20 fathoms, August 24, 1951.

## Antillogorgia americana (Gmelin, 1791)

9 miles west of Big Marco Pass (Florida), 25° 58′ N., 81° 55″ W., 6.5 fathoms, September 26, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

## Pterogorgia anceps (Pallas, 1766)

Clearwater Bay, Fla., February 1879: C. A. and J. S. Watson.

#### Pterogorgia guadalupensis Duchassaing and Michelin, 1846

4 miles SW. by S. of Smith Shoal (Florida) Light: 24° 41′ N., 81° 58′ W., 7½ fathoms, September 29, 1948, University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

## Genus Leptogorgia H. Milne Edwards, 1857

This genus is characterized among the gorgoniids by the absence (1) of specialized types of spicules and (2) of specialized modes of branching, e.g., reticulate, alate, or lamellate, and therefore is least divergent from what is considered the primitive condition. At least four species in the western Atlantic belong to this genus, two of which (*L. hebes, L. miniata*) have been found in the Gulf of Mexico. One species usually referred to *Leptogorgia*, namely *Gorgonia virgulata* Lamarck, regularly has spicules modified into disk spindles like those of the genus *Eugorgia* Verrill, heretofore not recorded from the Atlantic Ocean; and another, *G. setacea* Pallas, has less

modified but still highly atypical sclerites. Although one obvious conclusion might be that Eugorgia should not be maintained separate from Leptogorgia, it seems preferable at this time to retain both genera, referring G. virgulata Lamarck to Eugorgia, and G. setacea Pallas tentatively to Leptogorgia. It is quite possible that in the future a new subgenus of Eugorgia will be required for the Atlantic forms, or even that all will be united as subgenera of Leptogorgia.

## Leptogorgia hebes Verrill, 1869

3.5 miles SW. of Longboat Pass, Sarasota, Fla.,5–6 fathoms, March 24, 1951: J. Brookes Knight.Matagorda, Tex.: John Q. Kain.

## Leptogorgia miniata (Valenciennes, 1855)

Off Palm Beach, Fla., 20–40 fathoms, July 22 and 28, 1950: m/v Triton, Thompson and McGinty.

## Genus Eugorgia Verrill, 1868

The species long known as *Leptogorgia virgulata* (Lamarck) is transferred to Verrill's genus on the basis of its spindles with fused, disklike belts of warts. Three new western Atlantic species are added to the genus.

Spicules of E. ampla Verrill, the type species, are shown in Fig. 1, a-c, for comparison.

# Eugorgia virgulata (Lamarck, 1815), n. comb. Fig. 1, $d\!-\!i$

10 miles NW. by N. of New Pass (Florida) buoy, 27° 25′ N., 82° 45′ W., 5.5 fathoms, September 24, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

9 miles NE. by N. of Ochlockonee Shoal (Florida) bell buoy, 29° 59′ N, 84° 05′ W., 3.5 fathoms, October 27, 1948: University of Miami Marine Laboratory Gulf Explorations, J. Q. Tierney.

8 miles W. by N. of Laguna Beach, Fla., 30° 16′ N., 86° 04′ W., 10 fathoms, October 24, 1948: University of Miami Laboratory Gulf Explorations, J. Q. Tierney.

South of Marsh Island, La., *Oregon* station 295: 28° 41′ N., 91° 49′ W., 17.5 fathoms, April 4, 1951.

Remarks.—Most of the blunt spindles have their warts fused to form thick disks, as illustrated in Fig. 1, d-g; long, simple spindles, often with the warts of one side higher and conical (Fig. 1, h, i) are also present, in larger numbers

near the twig tips than lower down on the colony. There is no polyp armature regularly present, but some flat, typically "gorgoniid" rods are sometimes found.

Through the kindness of Dr. Gilbert Ranson, of the Muséum National d'Histoire Naturelle, Paris, I have examined spicules from a fragment of Lamarck's type, which agree well with those of the specimens recorded above.

Range.—Jamaica? Gulf of Mexico to New York; not at present known from the east coast of Florida.

## Eugorgia stheno, n. sp. Fig. 1, j-n

Off Palm Beach, Fla., 30-40 fathoms, July 28,

1950: m/v Triton, Thompson and McGinty.
Off Government Cut, Miami, Fla., 40 fathoms,
January 24, 1951: University of Miami Marine
Laboratory: U.S.A. m/v T-19, F. M. Bayer.

South of Mobile, Ala., Albatross station 2387: 29° 24′ 00″ N., 88° 04′ 00″ W., 32 fathoms, March 4, 1885. (Holotype, U.S.N.M. no. 49774; paratypes, nos. 49775, 49776, 49777.)

Also from the following *Albatross* stations in the vicinity: 2388, 2389, 2390.

Description.—Colonies normally unattached, unbranched or with only one or two simple branches, with a growing tip at all free ends; rarely attached to small rocks or shells. Length variable, commonly 20 cm; diameter 0.4-0.75 mm, in most cases 0.5-0.6 mm, exclusive of the anthosteles. Stem round or but slightly flattened. Anthosteles bluntly conical, somewhat compressed in the long axis of the colony, 0.5-0.75 mm tall; arranged biserially, a single row on each side of the stem, the individuals alternating more or less regularly; distance between zooids (mouth to mouth) 2.5 to 6 mm. On the sides between the zooid rows there is a weak longitudinal ridge, usually detectable only near the tips of the stem, which marks the path of the longitudinal stem canal beneath it. The anthocodiae are fully retractile but in preserved specimens they may remain exsert; beneath each tentacle is an en chevron field of flat rods with scalloped edges (Fig. 1, j); in the pinnules there are delicate, slightly curved, smooth rods (Fig. 1, k). The cortical spiculation consists of short, blunt spindles with the warts more or less fused into disks, many of them perfect disk-spindles (Fig. 1, 1); and long spindles with the warts of one side taller and partly fused, proportionally more

numerous near the growing tips than in the middle of the colony (Fig. 1, m). The axial sheath contains symmetrically sculptured spindles (Fig. 1, n). Several color phases occur: (1) uniform cream white or pale yellow; (2) white or yellow with red anthosteles; (3) uniform reddish or pinkish orange. Anthocodial spicules in phases 2 and 3 are usually yellow.

Remarks.—Eugorgia stheno always has a distinct anthocodial armature, unlike E. virgulata and the Pacific species of this genus.

This species was taken in abundance at several stations in the northern Gulf of Mexico; the collections from the lower east coast of Florida consist of only a single specimen each.

## Eugorgia euryale, n. sp. Fig. 1, o-s

South of Carrabelle, Fla., Albatross station 2407: 28° 47′ 30″ N., 84° 37′ 00″ W., 24 fathoms, March 15, 1885. (Holotype, U.S.N.M. no. 49764; paratype, no. 49765.)

Description.—Colonies attached (?) or free; similar in general appearance to E. stheno but much stouter. The type is an unbranched colony 83.5 cm long which shows no evidence that it was ever attached. Near the tips the stem is about 0.9 mm in diameter, increasing to slightly more than 1.0 mm near the middle. Along the two bare sides of the stem runs a longitudinal ridge or furrow depending upon whether the longitudinal canals are distended or collapsed. Anthosteles conical, about 0.5 mm tall, 2.5 to 3.0 mm apart, near the ends of the colony arranged in a single row on each side of the stem, mostly opposite; toward the middle there is an alternating double row along each side. The anthocodiae are fully retractile but may remain exsert in preservation; they have an armature of flat rods (Fig. 1, o) arranged obscurely en chevron beneath the tentacles and parallel for a short distance on the tentacle bases; in the distal portion of the tentacles only smooth, curved rods are present (Fig. 1, p).

The cortical sclerites include disk spindles larger than those of *E. stheno*, sometimes with four median disks instead of the usual two (Fig. 1, q); these grade into the long spindles which are largest and most numerous near the ends of the colony. These spicules are somewhat flattened, with the warts of the outside rather smooth, conical, and more or less fused together, while those on the edges and on the inner surface

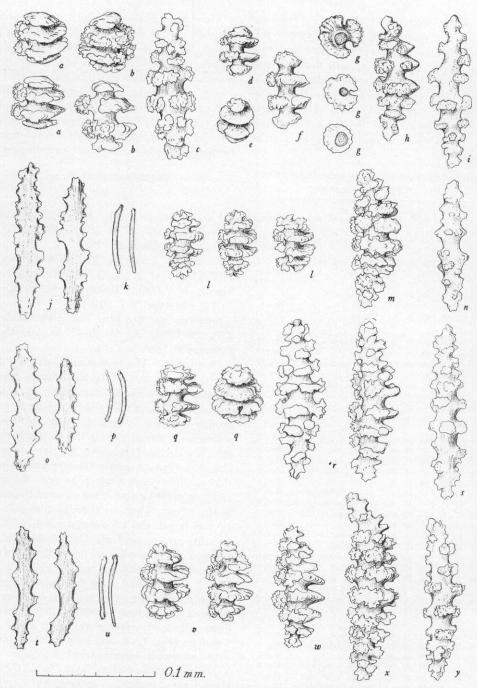


Fig. 1.—a-c, Eugorgia ampla Verrill, spicules from a specimen identified by Prof. Verrill: a, Extreme form of disk spindle; b, less strongly developed disk spindles; c, spindle. d-i, Eugorgia virgulata (Lamarck): d-f, Disk spindles; g, isolated disks from disk spindles; h, asymmetrical spindle; i, symmetrical spindle. j-n, Eugorgia stheno, n. sp.: j, Gorgoniid rods of anthocodiae; k, small rods of anthocodiae; l, disk spindles; m, asymmetrical spindle; n, spindle of axial sheath. o-s, Eugorgia euryale, n. sp.: o, Gorgoniid rods of anthocodiae; p, small rods of anthocodiae; q, disk spindles; r, two views of the same asymmetrical spindle; s, spindle of axial sheath. t-y, Eugorgia medusa, n. sp.: t, Gorgoniid rods of anthocodiae; u, small rods of anthocodiae; v, disk spindles; w, long disk spindle; x, asymmetrical spindle; y, axial sheath spindle.

are typically complicated (Fig. 1, r). Only by viewing these spicules from the edge can this difference between the inner and outer sculpture be seen, and since they are both flattened and bent they do not often present themselves in profile in a preparation. The axial sheath contains spindles with symmetrical belts of low warts (Fig. 1, s). The color of the colony is pinkish cream, the calyces red with a yellowish area at the summit.

LIST OF ALBATROSS STATIONS REFERRED TO IN THE ACCOMPANYING TEXT

Sta- tion No.	Lat. N			Long. W.			Depth	Kind of bottom	Date	
-	0	,	"	0	,	"	fms.		1884	
2138	17	44	05,	75	39	00.	23	co. brk. sh.	Feb. 29	
2156	23	10	35,	82	21	55.	278	co.	Apr. 30	
2157	23	10	04.	82	21	07.	29		Apr. 30	
2160	23	10	31,	82	20	37.	167	co.	Apr. 30	
2166	23	10	36,	82	20	30.	196	co.	May 1	
2168	23	10	36,	82	20	20.	122	co.	May 1	
2100			,						1885	
2323	23	10	51,	82	19	03.	163	wh. br. co.	Jan. 17	
2324	23	10	25,	82	20	24.	33	co.	Jan. 17	
2326	23	11	45,	82	18	54.	194	br. co.	Jan. 17	
2327	23	11	45,	82	17	54.	182	fne. br. s.	Jan. 17	
2333	23	10	36,	82	19	12.	169	fne. wh. co.	Jan. 19	
2334	23	10	42,	82	18	24.	67	wh. co.	Jan. 19	
2354	20	59	30,	86	23	45.	130	co.	Jan. 22	
2370	29	18	15,	85	32	00.	25	ers. gy. s. brk.	Feb. 7	
2371	29	17	00,	85	30	45.	26	gy. s. brk. sh.	Feb. 7	
2379	28	00	15,	87	42	00.	1467	yl. oz.	Mar. 2	
2384	28	45	00,	88	15	30.	940	br. gy. m.	Mar. 3	
2387	29	24	00.	88	04	00.	32	s. g. brk. sh.	Mar. 4	
2388	29	24	30,	88	01	00.	35	yl. s. bk. sp.	Mar. 4	
2389	29	28	00,	87	56	00.	27	gy. s. brk. sh.	Mar. 4	
2390	29	27	30.	87	48	30.	30	crs. s. bk. sp. sh.	Mar. 4	
2392	28	47	30,	87	27	00.	724	br. gy. m.	Mar. 13	
2394	28	38	30,	87	02	00.	420	gn. m.	Mar. 13	
2397	28	42	00,	86	36	00.	280	gy. m.	Mar. 14	
2400	28	41	00,	86	07	00.	169	gy. m.	Mar. 14	
2405	28	45	00,	85	02	00.	30	gy. s. brk. co.	Mar. 15	
2407	28	47	30,	84	37	00.	24	co. brk. sh.	Mar. 15	
2412	26	18	30,	83	08	45.	27	fne. gy. s. bk. sp. brk. sh.	Mar. 19	
2415	30	44	00,	79	26	00.	440	co. crs. s. sh. for.	Apr. 1	
2416		26	00,	79	07	00.	276	co. brk. sh.	Apr. 1	
									1886	
2651	24	02	00,	77	12	45.	97	wh. oz.	Apr. 13	
2661		16	30,	79	36	30.	- NASS2000	gy. s. bk. sp.	May 4	
2666	30	47	30,	79	49	00.	270	gy. s.	May 5	
2667	30	53	00,	79	42	30.	10000000	gy. s. bk. sp.	May 5	
2668		58	30,	79	38	30.	1000000	gy. s. dd. co.	May 5	
2669		09	00,	79	33	30.	352	gy. s. dd. co.	May 5	

#### Abbreviations used in denoting bottom character:

1	ok.	=	black	fne.	=	fine	oz.	=	ooze
1	or.	=	brown	for.	=	Foraminifera	8.	=	sand
100			broken	g.	=	gravel	sh.	=	shells
	20.	_	coral	gn.	=	green	sp.	=	specks
			coarse	gy.	=	gray			white
			dead	m.	=	mud	yl.	=	yellow

A paratype is present which was apparently attached at one time although no base is preserved. The angle and curvature of the single branch, and the regeneration of the rind at the proximal end of the main stem suggest that the colony was growing in a recumbent position.

Remarks.—Although E. euryale is similar in many respects to E. stheno, it seems desirable to consider both as species since no connecting intermediates are known by which to unite them.

#### Eugorgia medusa, n. sp.

Fig. 1, t-y

ESE. of Boca Grande (Florida) Light, *Albatross* station 2412: 26° 18′ 30″ N., 83° 08′ 45″ W., 27 fathoms, March 19, 1885.

South of Carrabelle, Fla. *Albatross* station 2407: 28° 47′ 30″ N., 84° 37′ 00″ W., 24 fathoms, March 15, 1885. (Holotype, U.S.N.M. no. 49776; paratype, no. 10464.)

South of Cape San Blas, Fla., Albatross station  $2371:29^{\circ}\ 17'\ 00''\ N.$ ,  $85^{\circ}\ 30'\ 45''\ W.$ ,  $26\ fathoms$ , February 7, 1885.

Description.—The type is an unattached stem 44 cm long, bent at almost right angles near the middle where a single branch 18.5 cm long is given off. All three apices show regions of active growth—no base is present. Near the tips the somewhat flattened stem is 1.0-1.5 mm in diameter (exclusive of calyces); the low, rounded, almost contiguous calyces are arranged on either side of the stem in single rows near the apices and in alternating double rows toward the middle of the colony. They are 0.25-0.5 mm tall, 1.0-1.5 mm broad, and 1.5-2.0 mm apart (mouth to mouth); arrangement may be alternate or opposite. The anthocodiae are fully retractile within the anthosteles, and are armed with flat rods (Fig. 1, t) below and upon the tentacle bases.

The superficial cortical layer contains numerous well formed disk spindles with two median disks (Fig. 1, v), spindles of greater length with 4–6 disks (Fig. 1, w), and long, pointed spindles with somewhat asymmetrical sculpture (Fig. 1, x). In the inner cortical layer ("axial sheath") there are perfectly symmetrical spindles (Fig. 1, y).

In color the colonies are uniform pinkish buff. Remarks.—Eugorgia medusa differs from E. stheno and E. euryale in its more closely set, low calyces, in the form of the disk spindles and the presence of long spindles with 4–6 disks. Family Gorgonellidae
Scirpearia funiculina (Duchassaing and
Michelotti, 1864)

South of Mobile, Ala. from *Albatross* stations 2387, 2388, 2389.

Family Chrysogorgidae Chrysogorgia elisabethae F. M. Bayer, 1951 Near Havana, Cuba: Univ. of Iowa Expedition.

Chrysogorgia elegans (Verrill, 1883)

Off Cape San Blas, Fla., Albatross station 2397. SE. of Aransas Pass, Tex., Oregon station 548: 27° 01.4′ N., 96° 16.8′W., 200–280 fathoms, April 18, 1952; and station 549: 26° 58.5′ N., 96° 06.7′ W., 300–400 fathoms, April 18, 1952.

Family Isididae Acanella eburnea (Pourtalès, 1868)

South of Apalachicola, west of Tampa, Fla., Oregon station 489: 27° 44′ N., 85° 09′ W., 254 fathoms, September 27, 1951.

From south of Choctawhatchee Bay, Fla., to south of Mobile, Ala., from *Albatross* stations 2384, 2392, 2394, 2397, 2400.

Order PENNATULACEA
Family Renillade
Renilla mülleri Kölliker, 1872
6 miles off Pass à Loutre, La., March 13, 1931:

J. C. Pearson.

Corpus Christi, Tex.: C. T. Reed.

Family Funiculinidae

Funiculina quadrangularis (Pallas, 1766)

South of Pensacola, Fla., Albatross station 2394.

Family Protoptilidae

Protoptilum sp. cf. thomsoni Kölliker, 1872

South of Mobile, Ala., *Oregon* station 314: 29° 15.5′ N., 87° 53′ W., 175 fathoms, April 27, 1951.

SE. of Pass à Loutre, La., *Oregon* station 126: 29° 02′ N., 88° 34.5′ W., 195 fathoms, September 23, 1950.

Family Umbellulidae

Umbellula güntheri Kölliker, 1880

South of Mobile, Ala., Albatross station 2379.

Family Virgularidae
Virgularia mirabilis (Linnaeus, 1758)

South of Mobile, Ala., Albatross station 2387. Off Galveston, Tex., Grampus station 10470: 29° 03′ N., 94° 26′ W., 9 fathoms, February 28, 1917.