

To Dr. F. L. Whitney
with the compliments
of the author

AN ANNOTATED BIBLIOGRAPHY
OF NORTH AMERICAN
UPPER CRETACEOUS CORALS

1785 - 1950

By BOB F. PERKINS

FONDREN SCIENCE SERIES

NUMBER 3

SOUTHERN METHODIST UNIVERSITY PRESS
DALLAS

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INTRODUCTION

Although more than one hundred species of corals have been described from the Upper Cretaceous formations of North America, there has been no attempt, to date, to compile a bibliographic index of the species. The author feels that such an index would be useful to paleontologists in future identifications.

The following bibliography includes a list, with annotations, of all available literature on North American corals of Upper Cretaceous age; a catalogue of genera and species; and a plate showing the distribution of species.

The author wishes to express his gratitude to Dr. Lloyd H. Shinners of Southern Methodist University for his advice and aid in the solution of the many nomenclatural problems encountered in the preparation of the bibliography. To Miss Elizabeth Julian and other members of the Fondren Library staff acknowledgments are also made for the assistance they rendered in locating and obtaining many of the volumes included in the bibliography.

The author wishes also to express his gratitude to Dr. John W. Wells of Cornell University and Dr. C. C. Albritton, Jr., of Southern Methodist University for reading the manuscript and offering many helpful suggestions.

Literature examined was obtained from the following libraries:

- University of Illinois Library, Urbana, Illinois
- Indiana University Library, Bloomington, Indiana
- University of Iowa Library, Iowa City, Iowa
- Louisiana State University Library, University, Louisiana
- Harvard University, Museum of Comparative Zoology Library, Cambridge, Massachusetts
- University of Michigan Library, Ann Arbor, Michigan
- Agricultural and Mechanical College of Texas Library, College Station, Texas
- Southern Methodist University Library, Dallas, Texas
- Rice Institute Library, Houston, Texas
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ABBREVIATIONS

Acad.....	Academy	Natl.....	National
Am.....	American	no.....	number
Ann.....	Annual	p.....	page
art.....	article	Phil.....	Philadelphia
Bull.....	Bulletin	pl.....	plate
Col.....	Columbian	pls.....	plates
Coll.....	Collections	pp.....	pages
Comp.....	Comparative	Proc.....	Proceedings
Dept.....	Department	Prof.....	Professional
deutsch.....	deutsche	Pt.....	Part
Econ.....	Economic	Pub.....	Publication
fig.....	figure	Quart.....	Quarterly
figs.....	figures	Sci.....	Science
Geog.....	Geographic, etc.	ser.....	series
Geol.....	Geologic, etc.	Smiths.....	Smithsonian
geol.....	geologische	Soc.....	Society
Ges.....	Gesellschaft	sp.....	species
Jour.....	Journal	Spec.....	Special
Mag.....	Magazine	Terr.....	Territory, Territories
Misc.....	Miscellaneous	Univ.....	University
Mon.....	Monograph	U. S.....	United States
MS.....	Manuscript	var.....	variety
Mus.....	Museum	vol.....	volume
n.....	new	Zeitschr.....	Zeitschrift
Nat.....	Natural	Zool.....	Zoological, etc.

GENERAL REFERENCES

- BOYLE, ALBERT C., JR., *A Catalogue and Bibliography of North American Mesozoic Invertebrata*, United States Geological Survey, Bulletin 102, 315 pp., 1893.
- NICKLES, JOHN M., *Geologic Literature on North America, 1785-1918*; Part I, *Bibliography*, United States Geological Survey, Bulletin 746, 1,167 pp., 1923; Part II, *Index*, Bulletin 747, 658 pp., 1924.
- Bibliography of North American Geology, 1919-1928*, United States Geological Survey, Bulletin 823, 1,005 pp., 1931.
- THOM, EMMA MERTINS, *Bibliography of North American Geology, 1929-1939*, United States Geological Survey, Bulletin 937, 1,546 pp., 1944; *1940 and 1941*, Bulletin 938, 479 pp., 1942; *1942 and 1943*, Bulletin 949, 460 pp., 1945; *1944 and 1945*, Bulletin 952, 496 pp., 1947.
- and Hooker, Marjorie, and Dunavan, Ruth Reece, *Bibliography of North American Geology, 1945 and 1947*, United States Geological Survey, Bulletin 958, 658 pp., 1949; *1948*, Bulletin 968, 309 pp., 1950.
- WHITNEY, FRANCIS LUTHER, *Bibliography and Index of North American Mesozoic Invertebrata*, Bulletins of American Paleontology, vol. 12, no. 48, 448 pp., June 29, 1928.
- WILMARTH, MARY GRACE, *Lexicon of Geologic Names of the United States (including Alaska)*, United States Geological Survey, Bulletin 896, 2,396 pp., 1938.

BIBLIOGRAPHY

ADKINS, WALTER SCOTT

Handbook of Texas Cretaceous fossils. Texas Univ., Bull. no. 2838, 385 pp., 37 pls., 1928.

Listing and in most cases descriptions of the Cretaceous fossils of Texas. Included are the descriptions of two corals, *Hindeastraea discoidea* White and *Micrabacia mineolensis* Stephenson, from the Navarro of Kaufman and Wood counties, Texas.

BOLSCHKE, WILHELM

Polypi. In: Credner, Hermann, Die Kreide von New Jersey, Zeitschr. deutsch. geol. Ges., vol. 22, pp. 215-217, 1870.

Descriptions of the fossils of the Cretaceous formations of New Jersey. Included are the descriptions of two species of coral, *Astraea cretacea* Bolsche and *Parasmilia ballanophylloides* Bolsche.

DALLAS PETROLEUM GEOLOGISTS

Geology of Dallas County, Texas. Field and Laboratory, vol. 10, no. 1, pp. 1-135, 3 pls., December, 1941.

General geology of Dallas County, Texas. An annotated check list of the fossils of the Eagle Ford formation includes one coral, *Isastrea discoidea* White.

DUNCAN, PETER MARTIN

1. (and Wall, G. P.) A notice of the geology of Jamaica, especially with reference to the district of Clarendon; with descriptions of the Cretaceous, Eocene and Miocene corals of the islands. Quart. Jour. Geol. Soc. London, vol. 21, pp. 1-15, 2 pls., 1865.

Descriptions of two Upper Cretaceous corals, *Heliastrea cyathiformis* Duncan and *Porites reussiana* Duncan, with note of three others. These forms are listed by Duncan as being Lower Cretaceous in age; however, later authors have found them to all be Upper Cretaceous.

2. On the fossil corals (Madreporaria) of the West-Indian Islands. Quart. Jour. Geol. Soc. London, vol. 24, pp. 9-33, 1868.

Summary of Duncan's work on the fossil corals of the West Indies. Includes the descriptions of several new species of coral, none of which are Cretaceous in age. A chart, showing the geologic and geographic distribution of the various genera and species of fossil corals that have been described from the islands, includes the following Cretaceous forms: *Diploria crassolamellosa* Duncan, *Heliastrea exsculpta* Reuss, *Cyathoseris haidingeri* Reuss, and *Porites reussiana* Duncan.

DURHAM, JOHN WYATT

Pacific coast Cretaceous and Tertiary corals. Jour. Paleontology, vol. 17, no. 2, pp. 196-202, 1 pl., March, 1943

Descriptions of twelve species and one variety of Cretaceous and Tertiary corals of the Pacific coast. One Upper Cretaceous form, *Flabellum fresnoense* Durham, is described.

FELIX, JOHANNES

Fossilium Catalogus, I: Animalia, edited by F. Frech, pars 7: Anthozoa neocretacea, 128 pp., Berlin, 1914.

Catalogue of Upper Cretaceous corals. Includes complete synonymy and

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FELIX, JOHANNES — *Continued*

occurrence of individual species. The following North American species are listed: *Cladocora jamaicaensis* Vaughan, *Isastrea discoidea* White, *Leptophyllia agassizi* Vaughan, *Trochocyathus woolmani* Vaughan, *Caryophyllia johannis* White, *Beaumontia ? solitaria* White, *Chaetetes ? dimissus* White, and *Caryophyllia egeria* White.

FRECH, FELIX

Charles White: On *Hindeastraea*, a new generic form of Cretaceous *Astraeidae*, Neues Jahrbuch, Band I, 1889, p. 322.

Review of White's paper (see White 4) on *Hindeastraea discoidea* from the Ripley group of Texas. The reviewer does not accept the new genus and refers the species to *Isastraea*.

GABB, WILLIAM MORE

1. Description of the Cretaceous fossils. Calif. Geol. Survey, Paleontology, vol. 1, pp. 55-236, 32 pls., 1864.

Systematic descriptions of the Cretaceous fossils of California. Two corals, *Astrocoenia petrosa* Gabb and ? *Trochosmilium granulifera* Gabb, are described. The former is doubtfully Cretaceous and the latter is from the Upper Cretaceous Chico series.

2. Cretaceous and Tertiary fossils. Calif. Geol. Survey, Paleontology, vol. 2, 299 pp., 1869.

Systematic descriptions of the Cretaceous and Tertiary fossils of California. Also given is a synopsis of all the described invertebrate fossils of the Cretaceous of California and bordering states. Listed in the synopsis are two corals, *Astrocoenia petrosa* Gabb and *Trochosmilium granulifera* Gabb, the first doubtfully Cretaceous and the second from the Upper Cretaceous Chico series.

HAUG, EMIL

Ueber sogenannte *Chaetetes* aus mesozoischen Ablagerungen. Neues Jahrbuch 1883, Band 1, pp. 171-179, 1 pl.

Discussion of the genus *Chaetetes* from the Mesozoic formations. One North American Upper Cretaceous species, *Chaetetes* (?) *dimissus* White is listed and briefly described.

HILL, ROBERT THOMAS

1. A preliminary annotated check list of the Cretaceous invertebrate fossils of Texas, accompanied by a short description of the lithology and stratigraphy of the system. Texas Geol. Survey, Bull. 4, 57 pp., 1889.

List includes one Upper Cretaceous coral, *Isastrea discoidea* White, from the shales at Eagle Ford, Texas.

2. Check list of the invertebrate fossils from the Cretaceous formations of Texas, accompanied by notes on their geographic and geologic distribution, 16 pp., Austin, Texas, 1889.

List includes one species of Upper Cretaceous coral, *Isastrea discoidea* White, from the shales at Eagle Ford, Texas.

HOFFMEISTER, JOHN EDWARD

A new fossil coral from the Cretaceous of Texas. U. S. Natl. Mus. Proc., vol. 76, art. 23, 3 pp., 2 pls., 1929.

Description of *Hindeastraea collinensis* Hoffmeister from the Wolfe City sand of the Taylor marl, Collin Co., Texas. Included in addition to plates of *H. collinensis* are plates of *H. discoidea* White, the type of the genus.

JOHNSON, CHARLES WILLISON

1. Ripley Cretaceous fossils at 150 feet. The bed a continuation of that outcropping at Lenola. Geol. Survey of N. J., Ann. Rpt. of the State Geologist, 1897 (1898), pp. 263-265.

List (no descriptions) of several invertebrate Cretaceous fossils from the Matawan Clay marls of New Jersey. The specimens were taken from an artesian well-boring at Mount Laurel, New Jersey. One coral, *Platytrochus speciosus* Gabb and Horn, is included in the listing.

2. New Cretaceous fossils from an artesian well-boring at Mount Laurel, New Jersey. Phil. Acad. Nat. Sci. Proc., vol. 50, pp. 461-464, 1898.

The content of this paper is essentially the same as Johnson 1.

3. Annotated list of the types of invertebrate Cretaceous fossils in the collection of the Academy of Natural Sciences of Philadelphia. Phil. Acad. Nat. Sci. Proc., vol. 57, pp. 4-28, 1905.

List includes one species of Upper Cretaceous coral, *Trochocyathus woolmani* Vaughan.

LOGAN, WILLIAM NEWTON

1. The invertebrates of the Benton, Niobrara, and Fort Pierre groups. Kans. Univ. Geol. Survey, vol. 4, pp. 431-518, 35 pls., 1898.

Classification and description of the Upper Cretaceous invertebrates of Kansas. Includes note of an unidentified and undescribed coral from the Lincoln marble (Ft. Benton group) of Lincoln County, Kansas.

2. Contributions to the paleontology of the Upper Cretaceous series. Field Col. Mus. Pub. 36, Geol. Ser., vol. 1, no. 6, 14 pp., 5 pls., 1899.

Description of several invertebrate fossils from the Upper Cretaceous of Kansas. Included is a description of a new species of coral, *Astrocoenia conica* Logan, from the Lincoln marble (Ft. Benton group) of Mitchell County, Kansas.

MEEK, FIELDING BRADFORD

1. (and Hayden, F. V.) Description of new fossil species of Mollusca collected by Dr. F. V. Hayden in the Nebraska Territory together with a complete catalogue of all the remains of Invertebrata hitherto described and identified from the Cretaceous and Tertiary formations of that region. Phil. Acad. Nat. Sci. Proc., vol. 8, pp. 265-286, 1856.

The catalogue includes two unidentified and undescribed corals from the upper zones of the Cretaceous of the Nebraska Territory.

2. (and Hayden, F. V.) Systematic catalogue, with synonyma, etc., of Jurassic, Cretaceous and Tertiary fossils collected in Nebraska by the Exploring Expeditions under the command of Lieut. G. K. Warren, U. S. Topographical Engineers. Phil. Acad. Nat. Sci. Proc., vol. 12, pp. 417-432, 1860.

The catalogue includes one Upper Cretaceous coral, *Micrabacia coronula* Goldfuss.

3. Check list of the invertebrate fossils of North America; Cretaceous and Jurassic. Smiths. Misc. Coll. 7 (177), 40 pp., 1864.

MEEK, FIELDING BRADFORD — *Continued*

The list includes two species of Upper Cretaceous corals, *Websteria cretacea* Meek and Hayden and *Microstizia millepunctata* Meek.

4. A report on the invertebrate Cretaceous and Tertiary fossils of the upper Missouri country. U. S. Geol. Survey Terr. (Hayden), vol. 9, 629 pp., 45 pls., 1876.

Brief description of the Cretaceous and Tertiary stratigraphy of the upper Missouri country. Descriptions of the Cretaceous and Tertiary invertebrate fossils, including the following Upper Cretaceous corals: *Micrabacia americana* Meek and Hayden, *Websteria cretacea* Meek and Hayden, and *Microstizia millepunctata* Meek.

NOMLAND, JORGEN O.

- Corals from the Cretaceous and Tertiary of California and Oregon. Calif. Univ. Pub., Dept. Geol. Bull., vol. 9, pp. 59-76, 3 pls., 1916.

Descriptions of two Upper Cretaceous corals, *Trochocyathus oregonensis* Nomland and *T. pergranulatus* Nomland, from the Chico series of Oregon and California. There are also descriptions of thirteen new species of Tertiary corals from the same region. A table is included showing the stratigraphic position of the thirty-four known species of Upper Cretaceous and Tertiary corals of the Pacific coast.

PERKINS, BOB F.

- Hindeastraea discoidea* White from the Eagle Ford shale, Dallas County, Texas. Fondren Science Series, No. 2, 20 pp., 3 pls., 1951.

Description of *Hindeastraea discoidea* White from the Eagle Ford shale, Dallas County, Texas.

SHIMER, HERVEY W.

- (and Shrock, Robert R.) Index fossils of North America, New York, John Wiley and Sons, Inc., 837 pp., 303 pls., 1944.

Brief, systematic descriptions and plates of the more useful North American index fossils. The following genera and species of coral from the Upper Cretaceous are described: *Micrabacia cribraria* Stephenson, *M. rotatilis* Stephenson, *M. hilgardi* Stephenson, *M. americana* Meek and Hayden, *Goniopora reussiana* (Duncan), *Trochocyathus egerius* (White), *T. woolmani* Vaughan, *T. californianus* Vaughan, *Platytrochus* Edwards and Haime, *Parasmilia* Edwards and Haime, and *Haimesiastrea* Vaughan.

STANTON, TIMOTHY WILLIAM

- The faunal relationships of Eocene and Upper Cretaceous on the Pacific coast. U. S. Geol. Survey, Ann. Rpt. 17, Pt. 1, pp. 1005-1048, 1896.

Historical analysis and discussion of the Cretaceous-Tertiary boundary problem of the Pacific coast. Included in a list of Upper Cretaceous and Lower Eocene fauna is one coral, *Astrocoenia petrosa* Gabb, from the Upper Cretaceous of California.

STEPHENSON, LLOYD WILLIAM

1. A deep well at Charleston, S. C. U. S. Geol. Survey, Prof. Paper 90, pp. 69-94, 1914.

Brief description of the Cretaceous stratigraphy of the Charleston area based upon the section seen in a deep water well. One species of coral, *Trochocyathus* sp. aff. *T. woolmani* Vaughan, is reported from the Peedee Sand.

2. Coelenterata. In: Clark, William Bullock, Systematic paleontology of the Upper Cretaceous deposits of Maryland. Md. Geol. Survey, Upper Cretaceous, pp. 753-755, 2 pls., 1916.

Descriptions of the fossil Coelenterata from the Upper Cretaceous formations of Maryland. Included are the descriptions of the following species of coral from the Monmouth formation: *Platytrochus vaughani* Stephenson, *Micrabacia rotatilis* Stephenson, and *M. marylandica* Stephenson.

3. North American Upper Cretaceous corals of the genus *Micrabacia*. U. S. Geol. Survey, Prof. Paper 98, pp. 115-131, 4 pls., 1916.

Descriptions of the following species and varieties of *Micrabacia* Milne Edwards and Haime from the Atlantic and Gulf Coastal Plains and western interior of the United States: *M. americana* Meek and Hayden, *M. americana* var. *multicostata* Stephenson, *M. cribraria* Stephenson, *M. hilgardi* Stephenson, *M. marylandica* Stephenson, *M. mineolensis*, Stephenson, *M. mississippiensis* Stephenson, *M. rotatilis* Stephenson, and *M. rotatilis* var. *georgiana* Stephenson. A description of *M. coronula* Milne Edwards and Haime (the type of the genus) is given, although it is not known from the North American Cretaceous. A key to the species of the genus is also included.

4. The Cretaceous formations of North Carolina; Part I. Invertebrate fossils of the Upper Cretaceous formations. North Carolina Geol. and Econ. Survey, vol. 5, Pt. 1, 604 pp., 102 pls., 1923.

Systematic paleontologic study of the invertebrate fossils of the Upper Cretaceous of North Carolina. Includes the description of one coral, *Micrabacia cribraria* Stephenson, from the Snow Hill calcareous member of the Black Creek formation.

TRECHMANN, CHARLES TAYLOR

- Fossils from the Blue Mountains of Jamaica. Geol. Mag. 785, vol. 66, pp. 481-491, 1 pl., 1929.

Descriptions of fossils taken from near the top of Blue Mountain Peak, Jamaica. The fossils occur in the Blue Mountain Shale (Upper Cretaceous). One coral, *Paracyathus* (?) sp., is described.

VAUGHAN, THOMAS WAYLAND

1. Some Cretaceous and Eocene corals from Jamaica. Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), pp. 227-250, 1899.

Discussion of Duncan's work on the corals of Jamaica with corrections. The descriptions of Upper Cretaceous corals include the following: *Porites reussiana* Duncan, *Mesomorpha catadupensis* Vaughan, *Leptophyllia agassizi* Vaughan, *Trochoseris catadupensis* Vaughan, *Diploria conferticostata* Vaughan, *D. conferticostata* var. *columnaris* Vaughan, *Multicolumnastraea cyathiformis* Duncan, *Cladocora jamaicaensis* Vaughan and *Trochostomia hilli* Vaughan.

2. The Eocene and Lower Oligocene coral faunas of the United States with a few doubtfully Cretaceous species. U. S. Geol. Survey, Mon. 39, 263 pp., 24 pls., 1900.

General discussion concerning the coral faunas and systematic descriptions of the species. The doubtfully Cretaceous species described are as follows: *Trochocyathus californianus* Vaughan, *Favia merriami* Vaughan, *Haimesiastraea petrosa* (Gabb), and *Stephanocoenia fairbanksi* Vaughan.

VAUGHAN, THOMAS WAYLAND — *Continued*

3. *Trochocyathus woolmani*, a new coral from the Cretaceous of New Jersey. Phil. Acad. Nat. Sci. Proc., vol. 52, pp. 436-437, 1900.

Description of a new species of coral, *Trochocyathus woolmani* Vaughan, from the Matawan clay marls of New Jersey.

4. A critical review of the literature of the simple genera of the Madreporaria Fungida, with a tentative classification. U. S. Natl. Mus. Proc., vol. 28, no. 1401, pp. 371-424, 1905.

The review includes descriptions of the families of the Order Fungida, with the original diagnoses of the various genera. The genera included which have been reported from the North American Upper Cretaceous are as follows: *Cyclolites* Lamarek, *Haplaraea* Milaschewitz, *Leptophyllia* Reuss, *Metethmos* Gregory, *Micrabacia* Milne Edwards and Haime, and *Trochoseris* Milne Edwards and Haime.

5. Contributions to the geology and paleontology of the Canal Zone, Panama, and geologically related areas in Central America, Cuba, and Puerto Rico, with an account of the American Tertiary, Pleistocene and recent coral reefs. U. S. Natl. Mus. Bull. 103, pp. 189-524, 85 pls., 1919.

Included is a list of Eocene corals from St. Bartholomew and Jamaica. The Catadupa formation of Jamaica is given in the list as being Eocene; Vaughan states, however, "I seriously doubt the Catadupa corals being Eocene; it seems more probable that they are Cretaceous." Later authors have considered the Catadupa corals to be Cretaceous. The Catadupa corals listed are as follows: *Trochosmilium hilli* Vaughan, *Leptoria conferticostata* (Vaughan), *L. conferticostata* var. *columnaris* (Vaughan), *Trochoseris catadupensis* Vaughan, and *Multicolumnastraea cyathiformis* (Duncan).

6. Corals from the Cannonball marine member of the Lance formation. U. S. Geol. Survey, Prof. Paper 128-A, pp. 61-64, 1 pl., 1920.

Descriptions of the following species from the Cannonball marine member of the Lance formation: *Trochocyathus dakotaensis* Vaughan, *T. neumani* Vaughan, *Paracyathus kayserensis* Vaughan, *P. lloydi* Vaughan, *P. thomi* Vaughan, and *Steriphonotrochus leithensis* Vaughan.¹

7. (and Wells, John West.) Revision of the suborders, families, and genera of the Scleractina. Geol. Soc. Am. Spec. Paper 44, 363 pp., 51 pls., 1943.

Summary of previous investigations on the Scleractinia, anatomy, morphology, ecology, distribution, and evolution of the group in addition to a complete systematic classification of the sub-orders, families, and genera. Brief descriptions are given of each of the groups. The genera described of which there are North American Upper Cretaceous species are as follows: *Astrocoenia* Milne Edwards and Haime, *Stephanocoenia* Milne Edwards and Haime, *Astreopora* de Blainville, *Isastrea* Milne Edwards and Haime, *Trochoseris* Milne Edwards and Haime, *Siderastrea* de Blainville, *Leptophyllia* Reuss, *Felixastraea* Oppenheim, *Synastrea* Milne Edwards and Haime, *Haplaraea* Milaschewitsch, *Diplaraea* Mila-

¹There is some question as to the exact age of the Cannonball marine member of the Lance formation. Some authors place it in the Tertiary, others in the Cretaceous; however. "The U. S. Geol. Survey now classifies the Cannonball memb. and the demonstrably equi. part of Ludlow lignitic memb. as Upper Cret."—Wilmarth, M. Grace. Lexicon of geologic names of the United States (including Alaska). U. S. Geol. Survey, Bull. 896, Pt. 1, p. 336, 1938.

schewitsch, *Trechmannaria* Wells, *Paracycloseris* Wells, *Micrabacia* Milne Edwards and Haime, *Elephantaria* Oppenheim, *Actinacis* d'Orbigny, *Goniopora* de Blainville, *Favia* Oken, *Diploria* Milne Edwards and Haime, *Leptoria* Milne Edwards and Haime, *Cladocora* Ehrenberg, *Pleurococa* Milne Edwards and Haime, *Montastrea* de Blainville, *Placocoenia* d'Orbigny, *Multicolumnastraea* Vaughan, *Astrangia* Milne Edwards and Haime, *Hindeastraea* White, *Archohelia* Vaughan, *Trochosmia* Milne Edwards and Haime, *Vaughanoseris* Wells, *Dasmosmia* Pourtales, *Dichocoenia* Mile Edwards and Haime, *Caryophyllia* Lamarck, *Trochocyathus* Milne Edwards and Haime, *Paracyathus* Milne Edwards and Haime, *Platytrochus* Milne Edwards and Haime, *Parasmilia* Milne Edwards and Haime, and *Wadeopsammia* Wells.

WADE, BRUCE

The fauna of the Ripley formation on Coon Creek, Tennessee. U. S. Geol. Survey, Prof. Paper 137, 272 pp., 72 pls., 1926.

Description of the megascopic invertebrate and vertebrate fossils of the Ripley formation on Coon Creek, Tennessee. Descriptions of the following corals are given: *Micrabacia cribraria* Stephenson, *M. hilgardi* Stephenson, and *Trochosmia nodosa* Wade.

WELLER, STUART

A report on the Cretaceous paleontology of New Jersey. Geol. Survey of N. J., Paleontology Series, vol. 4, Pt. 2, pp. 267-273, 1907.

Descriptions of the invertebrate fossils of the Cretaceous formations of New Jersey. The following Upper Cretaceous forms are described: *Trochocyathus woolmani* Vaughan, *Micrabacia americana* Meek and Hayden, and *Paracyathus vaughani* Weller. Also three species are described from formations which, at the time of the writing of the paper, were thought to be Cretaceous but are now known to be Eocene.

WELLS, JOHN WEST

1. Corals of the Cretaceous of the Atlantic and Gulf Coastal Plains and Western Interior of the United States. Bull. Am. Paleontology, vol. 18, no. 67, 204 pp., 16 pls., August 3, 1933.

Brief discussion of previous work on Cretaceous corals of North America, discussion of the stratigraphic distribution of Cretaceous corals in North America, and systematic descriptions of the North American species of Cretaceous corals. The systematic descriptions include the generic diagnoses as well as descriptions and notes regarding occurrences of the individual species. Also keys to the species of the various genera are given. The Upper Cretaceous species described are as follows: *Platytrochus vaughani* (Stephenson), *Steriphonotrochus* ? *manorensis* Wells, *Caryophyllia stephensoni* Wells, *C. mississippiensis* Wells, *Trochocyathus egerius* (White), *T. woolmani* Vaughan, *T. taylorensis* Wells, *T. mississippiensis* Wells, *T. gardnerae* Wells, *Paracyathus* ? *vaughani* Weller, *Trochosmia moorei* Wells, *Basmosmia reesei* Wells, *Parasmilia* ? *balanophylloides* Bolsche, *Archohelia dartoni* Wells, *Hindeastraea discoides* White, *H. collinensis* Hoffmeister, *Siderastrea cretacea* (Bolsche), *Wadeopsammia nodosa* (Wade), *Micrabacia hilgardi* Stephenson, *H. hilgardi* var. *occidentalis* Wells, *M. marylandica* Stephenson, *M. navarroensis* Wells, *M. rotatilis*, Stephenson, *M. rotatilis* var. *georgiana* Stephenson, *M. cribraria* Stephenson, *M. arkansasensis* Wells, *M. stephensoni* Wells, *M. mississippiensis* Stephenson, *M. taylorensis* Wells, *M. americana* Meek, *M. americana* var. *multicostata* Stephenson, and *M. mineoensis* Stephenson.

2. Some fossil corals from the West Indies. U. S. Natl. Mus. Proc., vol. 83, no. 2985, pp. 71-110, 4 pls., 1934.

Descriptions of Upper Cretaceous and Eocene corals from the West

WELLS, JOHN WEST — *Continued*

Indies. The specimens described are those in the collections of the U. S. National Museum. A list is given showing twenty-two corals which have been reported from the Upper Cretaceous of Jamaica. The following species are described: *Trochocyathus matleyi* Wells, *Dichocoenia trechmanni* Wells, *Rhabdophyllia quaylei* Wells, *Dictyophyllia conferticostata* Vaughan, *Trochoseris catadupensis* Vaughan, *Centrastrea hilli* Wells, *Vaughanoseris catadupensis* Wells, *Favioseris anomalos* Wells, *Diplaraea* (?) *boltonae* Wells, *Cyclolites jamaicaensis* Wells, *Paracycloseris elizabethae* Wells, *Synastrea* (?) *adkinsi* Wells, *Prodiploastrea schindewoffi* Wells, *Multicolumnastraea cyathiformis* (Duncan), *Goniopora reussiana* (Duncan), and *G. trechmanni* Wells.

3. Corals from the Cretaceous and Eocene of Jamaica. *Annals and Mag. Nat. History*, 10th ser., vol. 15, no. 86, pp. 183-194, 3 pls., February, 1935.

Descriptions of several new species of coral from the Eocene and Upper Cretaceous formations of Jamaica. The following Upper Cretaceous species are described: *Trechmannaria montararoe* Wells, *Meandreaea clarendonensis* Wells, and *Elephantaria tottoni* Wells.

4. Upper Cretaceous corals from Cuba. *Bull. Am. Paleontology*, vol. 26, no. 97, 13 pp., 2 pls., February 17, 1941.

Descriptions of eight species of coral from the Upper Cretaceous of Cuba. The species described are as follows: *Astrocoenia dickersoni* Wells, *Trochoseris catadupensis* Vaughan, *Haplaraea* ? *discrepans* Wells, *Leptophyllia sanchez-roigi* Wells, *Paracycloseris elizabethae* Wells, *Goniopora reussiana* (Duncan), *Montastrea cubana* Wells, and *Trochocyathus* sp. cf. *T. mississippiensis* Wells.

5. Coral studies; Pt. 3, Three new Cretaceous corals from Texas and Alabama. *Bull. Am. Paleontology*, vol. 31, no. 123, 14 pp., 2 pls., June 7, 1947

Descriptions of three new species of Cretaceous coral. Two species described from the Upper Cretaceous are as follows: *Astrangia lamarensis* Wells and *Stenocyathus alabamiensis* Wells.

WHITE, CHARLES ABIATHAR

1. Paleontological papers, no. 11; Remarks upon certain Carboniferous fossils from Colorado, Arizona, Idaho, Utah, and Wyoming, and certain Cretaceous corals from Colorado, together with descriptions of new forms. *U. S. Geol. and Geog. Survey of the Terr. (Hayden)*, Bull. 5, pp. 209-221, 1879.

Descriptions include the following species of coral from the Fox Hills group at Fossil Ridge, Colorado: *Beaumontia* ? *solitaria* White and *Chaetetes* ?? *dimissus* White.

2. Contributions to invertebrate paleontology, no. 1; Cretaceous fossils of the Western States and Territories. *U. S. Geol. and Geog. Survey of the Terr. (Hayden)*, Ann. Rpt. 11, pp. 273-319, 1879.

Descriptions of Cretaceous invertebrate fossils from Wyoming, Utah, Colorado, New Mexico, and Texas. Included are descriptions of the following species of Upper Cretaceous coral: *Caryophyllia egeria* White and *Caryophyllia johannis* White.

3. Contributions to invertebrate paleontology, no. 2; Cretaceous fossils of the Western States and Territories. U. S. Geol. and Geog. Survey of the Terr. (Hayden), Ann. Rpt. 12, Pt. 1, pp. 5-39, 1883 (advance printing, 1880).

Descriptions of Cretaceous invertebrate fossils from the western United States. Included are the descriptions of the following corals from the Fox Hills group: *Beaumontia ? solitaria* White and *Chaetetes ?? dimissus* White.

4. On *Hindeastraea*, a new generic form of Cretaceous *Astraeidae*, Geol. Mag., ser. 3, vol. 5, no. 8, pp. 362-364, 1888.

Description of *Hindeastraea discoidea* White from the Navarro of Texas.

WOODRING, WENDELL P.

(and Brown, John S., and Burbank, Wilbur S.) Geology of the Republic of Haiti. 631 pp., 40 pls., Republic of Haiti, Dept. of Public Works, Port-au-Prince, 1924.

General geology of the Republic of Haiti. In a discussion of sedimentary rocks a list of the fossils of each formation is given. One undetermined species of coral is listed from the Upper Cretaceous and one undetermined species of the genus *Actinacis* is listed as being doubtfully Upper Cretaceous.

CATALOGUE OF GENERA AND SPECIES

ACTINACIS d'Orbigny, 1849

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 151, pl. XXII, figs. 2, 3

— n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

— sp. Woodring

Woodring, Geol. of the Republic of Haiti, 1924, p. 98, (name only)

Formation: "Probably Upper Cretaceous"

Location: Arrondissement of Jacmel, Haiti

ARCHOHELIA Vaughan, 1919

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 181

— *dartoni* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 223, pl. XII, figs. 11, 12; pl. XIV, figs. 31-35.

Formation: Mancos Shale (Carlile zone)

Location: Laney, New Mexico

ASTRAEA Lamarck, 1801

— *cretacea* Bolsche (also see *Siderastrea cretacea*)

Bolsche, Zeitschr. deutsch. geol. Ges., vol. 22, 1870, p. 216

Formation: Plastic clay

Location: Woodbury and Haddonfield, New Jersey

ASTRANGIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 177, pl. XXXI, fig. 5

— *lamarensis* Wells

Wells, Bull. Am. Paleontology, vol. 31, no. 123, Pt. 3, June 7, 1947, p. 166, pl. I, figs. 15, 16

Formation: Woodbine

Location: Near Old Slate Shoals, Red River, Lamar County, Texas

ASTREOPORA de Blainville, 1830

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 107

— ? n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

ASTROCOENIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 103, pl. V, figs. 1-4; pl. XIV, figs. 10, 10a

— *conica* Logan

Logan, Field Col. Mus. Pub. 36, Geol. Ser., vol. 1, no. 6, 1899, p. 25, pl. XXVI, figs. 1, 2, 3

Formation: Ft. Benton (Lincoln marble horizon)

Location: Rattlesnake Creek, Mitchell County, Kansas

— *dickersoni* Wells

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 287, pl. II, fig. 4

Formation: Caribbean Upper Cretaceous

Location: Central Perseverancia, Santa Clara Province, Cuba

— *petrosa* Gabb (also see *Haimesiastraea petrosa*)

Gabb, Calif. Geol. Survey, Paleontology, vol. 1, 1864, p. 208, pl. XXXI, fig. 274, 274a

Formation: "... from a single mass of limestone ..."

Location: One mile west of Martinez, California

Gabb, Calif. Geol. Survey, Paleontology, vol. 2, 1869, p. 254, (name only)

Formation: Martinez group

Location: Martinez, California

Stanton, U. S. Geol. Survey, Ann. Rpt. 17, Pt. 1, p. 1029, (name only)

Formation: Martinez group

Location: Martinez, California

BEAUMONTIA Milne Edwards and Haime, 1851

— ? *solitaria* White

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden), Bull. 5, 1879, p. 221

Formation: Fox Hills group

Location: Fossil Creek, Colorado

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden), Ann. Rpt. 12, Pt. 1, 1883, p. 7, pl. XII, figs. 13a, b, c

Formation: Fox Hills group

Location: Fossil Ridge, Ft. Collins, Colorado

Felix, Fossilium Catalogus, pars 7, 1914, p. 249, (name only)

Formation: Maestrichtien (Fox Hills group)

Location: Fossil Ridge, Colorado

CARYOPHYLLIA Lamarck, 1801

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 203, pl. IXL, figs. 3, 4, 6

— *egeria* White (also see *Trochocyathus egerius*)

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden), Ann. Rpt. 11, 1879, p. 275, pl. VI, figs. 7a, b

Formation: Pierre Shale

CARYOPHYLLIA Lamarck, 1801 — *Continued*

Location: Sage Creek, upper Yampa River, Colorado

Felix, Fossilium Catalogus, pars 7, 1914, p. 251, (name only)

Formation: Kreide

Location: New Mexico

— *johannis* White (also see *Trochocyathus egerius*)

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden),
Ann. Rpt. 11, 1879, p. 274, pl. VI, figs. 6a, b

Formation: Ft. Pierre; Fox Hills

Location: Cimarron, New Mexico

Felix, Fossilium Catalogus, pars 7, 1914, p. 210, (name only)

Formation: Senon ("Probably equivalent with Fort Pierre
and Fox Hills groups of the Upper Missouri.")

Location: Cimarron, New Mexico

— *mississippiensis* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 126, pl. XIV, figs. 19, 20

Formation: Selma Chalk (*Exogyra costata* zone)

Location: Running Water Creek, Noxubee County, Missis-
sippi; Wakalak, Noxubee County, Mississippi

— *stephensoni* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p.
124, pl. XII, figs. 6, 7; pl. XIV, figs. 15-18

Formation: (1) Navarro; (2) Arkadelphia clay

Location: (1) Mustang Creek, Williamson County, Texas;
Zorn, Guadalupe County, Texas; Chatfield, Navarro County,
Texas; (2) Hope, Arkansas²

CENTRASTREA d'Orbigny, 1849

— *hilli* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 80,
pl. II, figs. 11, 12

Formation: Upper Cretaceous

Location: Catadupa, Jamaica

CHAETETES Fischer, 1829

— ?? *dimissus* White

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden),
Bull. 5, 1879, p. 221

Formation: Fox Hills group

Location: Fossil Creek, Colorado

White, U. S. Geol. and Geog. Survey of the Terr. (Hayden),
Ann. Rpt. 12, Pt. 1, 1883, p. 7, pl. XII, fig. 14a

²Locality numbers refer to formational numbers.

Formation: Fox Hills group
 Location: Fossil Ridge, Ft. Collins, Colorado
 Haug, Neues Jahrbuch 1883, p. 178
 Formation: Fox Hills-Gruppe (Kreide)
 Location: Colorado
 Felix, Fossilium Catalogus, pars 7, 1914, p. 249, (name only)
 Formation: Maestrichtien (Fox Hills group)
 Location: Fossil Ridge, Colorado

CLADOCORA Ehrenberg, 1834

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 172, pl. XXIX, fig. 4

— *jamaicaensis* Vaughan

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 233, pl. XXXVI, figs. 5-7

Formation: Upper Cretaceous limestone

Location: Solomon Mountain, Jamaica

Felix, Fossilium Catalogus, pars 7, 1914, p. 171, (name only)

Formation: Obere Kreide

Location: Solomon Mountain, west of Mint, Westmoreland Parish, Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72, (name only)

Formation: Upper Cretaceous

Location: Jamaica

— sp. cf. *C. jamaicaensis* Vaughan

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

CYATHOSERIS Milne Edwards and Haime, 1849

— *haidingeri* (non Reuss) Duncan (also see *Meandraea clarendonensis*)

Duncan, Quart. Jour. Geol. Soc. London, vol. 21, 1865, pp. 7, 8, 12, (name only)

Formation: Upper Cretaceous

Location: Upper Clarendon district, Jamaica

Duncan, Quart. Jour. Geol. Soc. London, vol. 24, 1868, p. 25, (name only)

Formation: Cretaceous

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72, (name only)

Formation: Upper Cretaceous

Location: Jamaica

CYCLOLITES Lamarck, 1801

U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 404

— *jamaicaensis* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Upper Cretaceous

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 84, pl. III, figs. 1-4

Formation: Providence shales

Location: Providence, near Port Antonio, Jamaica

DACTYLOSMILIA d'Orbigny, 1849

— n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

DASMOSMILIA Pourtales, 1880

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 186, pl. XXXIV, fig. 7

— *reesidei* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 221, pl. XII, figs. 8, 9; pl. XIV, figs. 25-29

Formation: (1) Navarro; (2) Selma chalk (Oktibbeha tongue); (3) Selma chalk (*Liopistha protexa* subzone); (4) Selma chalk (*Exogyra costata* zone below the *L. protexa* subzone)

Location: (1) Guadalupe River, McQueeney, Guadalupe County, Texas; (2) A. & M. College, Starkville, Oktibbeha County, Mississippi; (3) Prairie Bluff, Wilcox County, Alabama; (4) Running Water Creek, Noxubee County, Mississippi

DICHOCOENIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 189, pl. XXXVII, figs. 3, 4

— *trechmanni* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 75, pl. II, figs. 7, 8

Formation: Rudistid limestone

Location: Logie Green section, Jamaica; near Catadupa, Jamaica

DICTUOPHYLLIA de Blainville, 1830

- *conferticostata* (Vaughan) (also see *Diploria conferticostata*, *D. crassolamellosa*, and *Leptoria conferticostata*)
Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 77
Formation: (1) Rudistid limestone; (2) limestone; (3) dark limestone near igneous intrusion
Location: (1) Below Catadupa Station, Jamaica; (2) Cambridge-Catadupa railway cut, Jamaica; (3) Mooretown, Jamaica
- *conferticostata* var. *columnaris* (Vaughan) (also see *Diploria conferticostata* var. *columnaris* and *Leptoria conferticostata* var. *columnaris*)
Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72, (name only)
Formation: Upper Cretaceous
Location: Jamaica

DIPLARAEA Milaschewitsch, 1876

- Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 133
- ? *boltonae* Wells 1932 (MS)
Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)
Formation: Rudistid limestone
Location: Jamaica
Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 83, pl. II, figs. 1, 2
Formation: Upper Cretaceous
Location: Near Catadupa, Jamaica

DIPLORIA Milne Edwards and Haime, 1848

- Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 166, pl. XXVII, figs. 1, 4, 5
- *conferticostata* Vaughan (also see *Dictuophyllia conferticostata*)
Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 239, pl. XXXIX, figs. 1-3
Formation: Upper Cretaceous limestone
Location: Trout Hall, Jamaica; Upper Clarendon, Jamaica; Catadupa, Jamaica
- *conferticostata* var. *columnaris* Vaughan (also see *Dictuophyllia conferticostata* var. *columnaris*)
Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 241, pl. XXXIX, fig. 4
Formation: Upper Cretaceous limestone
Location: Catadupa, Jamaica
- *crassolamellosa* Milne Edwards and Haime (also see *Dictuophyllia conferticostata*)

DIPLORIA Milne Edwards and Haime, 1848 — *Continued*

Duncan, Quart. Jour. Geol. Soc. London, vol. 21, 1865, pp. 7, 12, (name only)

Formation: Upper Cretaceous

Location: Trout Hall, Jamaica; Upper Clarendon district, Jamaica

Duncan, Quart. Jour. Geol. Soc. London, vol. 24, 1868, p. 24, (name only)

Formation: Cretaceous

Location: Jamaica

ELEPHANTARIA Oppenheim, 1930

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 151, pl. XXII, fig. 5

— *tottoni* Wells

Wells, Annals and Mag. Nat. History, 10th ser., vol. 15, no. 86, 1935, p. 192, pl. XII, figs. 4, 5

Formation: Upper Cretaceous limestone

Location: Catadupa, Jamaica

FAVIA Oken, 1815

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 166, pl. XXVI, fig. 5

— *merriami* Vaughan

Vaughan, U. S. Geol. Survey, Mon. 39, 1900, pp. 32, 142, pl. XV, figs. 5-5c

Formation: Cretaceous?

Location: Southern California

FAVIOSERIS Wells, 1934

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 82, pl. IV, figs. 19, 20

— *anomalos* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 82, pl. IV, figs. 19, 20

Formation: Limestone

Location: Near Catadupa, Jamaica

FELIXASTRAEA Oppenheim, 1930

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 131, pl. XVI, fig. 8

— ? n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds
Location: San Luis Potosi, Mexico

FLABELLUM Lesson, 1831

— *fresnoense* Durham

Durham, Jour. Paleontology, vol. 17, 1943, p. 197, pl. XXXII, figs. 2, 3

Formation: Upper Cretaceous
Location: Fresno County, California

GONIOPORA de Blainville, 1830

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 152, pl. XXII, fig. 7

Shimer and Shrock, Index fossils of North America, 1944, p. 117, pl. VIII, figs. 16, 17

— *reussiana* (Duncan) (also see *Porites reussiana*)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone
Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 90, pl. IV, fig. 18; pl. V, figs. 4, 5

Formation: Upper Cretaceous limestone
Location: Railway cut between Cambridge and Catadupa, Jamaica

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 292, pl. II, fig. 2

Formation: Caribbean Upper Cretaceous limestone
Location: Central Perseverancia, Santa Clara Province, Cuba; Esperanza, Havana Province, Cuba; Cambridge-Catadupa railway cut, Jamaica; "Upper Clarendon District," Jamaica

Shimer and Shrock, Index fossils of North America, 1944, p. 117, pl. VIII, figs. 16, 17

Formation: Upper Cretaceous
Location: Jamaica

— *trechmanni* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone
Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 91, pl. III, figs. 16, 17

Formation: (1) Upper Cretaceous limestone; (2) Actaeonella beds; (3) Providence shales

Location: (1) Cambridge-Catadupa railway cut, Jamaica; (2)

GONIOPORA de Blainville, 1830 — *Continued*

east of Smithville, Jamaica; (3) Providence, near Port Antonio, Jamaica

HAIMESIASTRAEA Vaughan, 1900

Shimer and Shrock, Index fossils of North America, 1944, p. 122, pl. IVL, figs. 1-3

— *petrosa* (Cabb) (also see *Astrocoenia petrosa*)

Vaughan, U. S. Geol. Survey, Mon. 39, 1900, pp. 32, 146, pl. XVII, figs. 1-6

Formation: "... mass of limestone ..."

Location: One mile west of Martinez, California

Nomland, Univ. Calif. Pub., Dept. Geol. Bull., vol. 9, 1916, p. 60, (name only)

Formation: Upper Cretaceous

Location: Pacific coast

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 117, (name only)

Formation: ?Upper Cretaceous

Location: West coast

HAPLARAEA Milaschewitsch, 1876

Vaughan, U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 395

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 133, pl. XV, fig. 4; pl. XVI, fig. 9

— ? *discrepans* Wells

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 289, pl. I, fig. 1

Formation: Caribbean Upper Cretaceous

Location: Central Perseverancia, Santa Clara Province, Cuba

HELIASTRAEA Milne Edwards and Haime, 1857

— *cyathiformis* (Duncan) (also see *Multicolumnastraea cyathiformis*)

Duncan, Quart. Jour. Geol. Soc. London, vol. 21, 1865, pp. 7, 8, pl. I, figs. 1a, b

Formation: Upper Cretaceous

Location: Trout Hall, Jamaica

Duncan, Quart. Jour. Geol. Soc. London, vol. 24, 1868, p. 24, (name only)

Formation: Cretaceous

Location: Jamaica

— *exsculpta* (Duncan) (also see *Multicolumnastraea cyathiformis*)

Duncan, Quart. Jour. Geol. Soc. London, vol. 21, 1865, pp. 7, 8, 11, (name only)

Formation: Upper Cretaceous

Location: Mt. Hindmost, Jamaica; Trout Hall, Jamaica;
Cupuis, Jamaica

Duncan, Quart. Jour. Geol. Soc. London, vol. 24, 1868, p. 24,
(name only)

Formation: Cretaceous

Location: Jamaica

HINDEASTRAEA White, 1888

White, Geol. Mag., ser. 3, vol. 5, no. 8, 1888, p. 363, figs. 1-5

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 179, pl.
XXXI, fig. 3

— *collinensis* Hoffmeister

Hoffmeister, U. S. Natl. Mus. Proc., vol. 27, art. 23, 1929, p. 2,
pl. I, figs. 1, 1a, 2, 2a; pl. II, figs. 2, 3, 4

Formation: Taylor (Wolfe City sand)

Location: Farmersville, Collin County, Texas

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 142

Formation: Taylor (Wolfe City sand)

Location: Farmersville, Collin County, Texas

— *discoidea* White (also see *Isastrea discoidea*)

White, Geol. Mag., ser. 3, vol. 5, no. 8, 1888, p. 363, figs. 1-5

Formation: Ripley group

Location: Kaufman County, Texas

Frech, Neues Jahrbuch, Band I, 1889, p. 322

Formation: Ripley group

Location: Kaufman County, Texas

Adkins, Handbook of Texas Cretaceous fossils, Texas, Univ.,
Bull. no. 2838, 1928, p. 75

Formation: Navarro

Location: Kaufman County, Texas

Hoffmeister, U. S. Natl. Mus. Proc., vol. 76, art. 23, 1929, p. 1,
pl. II, figs. 1, 1a

Formation: Navarro

Location: Kaufman County, Texas

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 225

Formation: Navarro

Location: Near Terrell, Kaufman County, Texas

Perkins, Fondren Science Series, no. 2, 1951, pl. I, figs. 1-10,
pl. II, figs. 1-9

Formation: Eagle Ford shale

Location: Arcadia Park, Dallas County, Texas

ISASTREA Milne Edwards and Haime, 1851

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 120, pl. X,
fig. 13

ISASTREA Milne Edwards and Haime, 1851 — *Continued*— *discoidea* White (also see *Hindeastraea discoidea*)

Frech, Neues Jahrbuch, Band I, 1889, p. 322

Formation: Ripley group

Location: Kaufman County, Texas

Hill, Texas Geol. Survey, Bull. 4, 1889, pp. 1, 25, 51, 53, (name only)

Formation: Eagle Ford shales

Location: Eagle Ford, Dallas County, Texas

Hill, Check list of the invertebrate fossils from the Cretaceous formations of Texas, 1889, p. 7, (name only)

Formation: Eagle Ford shales

Location: Eagle Ford, Dallas County, Texas

Felix, Fossilium Catalogus, pars 7, 1914, p. 174, (name only)

Formation: Senon (Ripley group)

Location: Kaufman County, Texas

Dallas Petroleum Geologists, Field and Laboratory, vol. 10, no. 1, 1941, p. 29, (name only)

Formation: Eagle Ford shales

Location: Eagle Ford, Dallas County, Texas

LEPTOPHYLLIA Reuss, 1854

Vaughan, U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 393

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 131, pl. XV, fig. 2; pl. XVI, figs. 1, 2

— *agassizi* Vaughan

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 242, pl. XL, figs. 1-4

Formation: Upper Cretaceous limestone

Location: Solomon Mountain, Jamaica

Felix, Fossilium Catalogus, pars 7, 1914, p. 193, (name only)

Formation: Obere Kreide

Location: Solomon Mountain, west of Mint, Westmoreland Parish, Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 73, (name only)

Formation: Upper Cretaceous

Location: Jamaica

— *sanchez-roigi* Wells

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 291, pl. I, fig. 3

Formation: Caribbean Upper Cretaceous

Location: Central Perseverancia, Santa Clara Province, Cuba

LEPTORIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 169, pl. XXVII, fig. 7

- *conferticostata* Vaughan (also see *Dictuophyllia conferticostata*)
 Vaughan, U. S. Natl. Mus., Bull. 103, 1919, p. 194, (name only)
 Formation: Catadupa
 Location: Jamaica
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 109, (name only)
 Formation: Rudistid limestone
 Location: Jamaica
- *conferticostata* var. *columnaris* Vaughan (also see *Dictuophyllia conferticostata* var. *columnaris*)
 Vaughan, U. S. Natl. Mus., Bull. 103, 1919, p. 194, (name only)
 Formation: Catadupa
 Location: Jamaica
- n. sp. aff. *L. conferticostata* Vaughan
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 111, (name only)
 Formation: Cardenas beds
 Location: San Luis Potosi, Mexico
- MEANDRAREA Etallon, 1859
- *clarendonensis* Wells (also see *Cyathoseris haidingeri*)
 Wells, Annals and Mag. Nat. History, 10th ser., vol. 15, no. 86,
 1935, p. 191, pl. XI, fig. 1
 Formation: Upper Cretaceous limestone
 Location: Upper Clarendon district, Jamaica
- MESOMORPHA Pratz, 1883
- *catadupensis* Vaughan
 Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol.
 Ser. 4), 1899, p. 246, pl. XLI, figs. 1-3
 Formation: Upper Cretaceous limestone
 Location: Catadupa, Jamaica
 Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72,
 (name only)
 Formation: Upper Cretaceous
 Location: Jamaica
- METETHMOS Gregory, 1900
- Vaughan, U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 398
- n. sp. Wells
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 111, (name only)
 Formation: Cardenas beds
 Location: San Luis Potosi, Mexico
- MICRABACIA Milne Edwards and Haime, 1849
- Vaughan, U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 387
 Stephenson, U. S. Geol. Survey, Prof. Paper 98, p. 116

MICRABACIA Milne Edwards and Haime, 1849 — *Continued*

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 145, pl. XX, figs. 1-3

Shimer and Shrock, Index fossils of North America, 1944, p. 117, pl. XLIII, figs. 7-15

— *americana* Meek and Hayden (also see *Micrabacia coronula*)

Meek and Hayden, U. S. Geol. Survey Terr. (Hayden), vol. 9, 1876, p. 1, pl. XXVIII, figs. 1, a, b, c, d

Formation: Fox Hills group

Location: Moreau River, South Dakota

Weller, Geol. Survey of N. J., Paleontology Series, vol. 4, Pt. 2, 1907, p. 271, pl. V, figs. 14-17

Formation: (1) Merchantville clay-marl; (2) Woodbury Clay; (3) Wenonah Sand

Location: (1) Near Matawan, N. J.; (2) Near Lorillard, N. J.; near Haddenfield, N. J.; (3) Near Crawford's Corner, N. J.

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 118, pl. XX, figs. 4, 5

Formation: (1) Fox Hills sandstone; (2) Bearpaw Shale; Pierre Shale; (3) Montana group

Location: (1) Moreau River, South Dakota; (2) Moorcroft, Wyoming; (3) Mingusville, Montana

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 250, pl. XVI

Formation: (1) Fox Hills sandstone; (2) Mesaverde group

Location: (1) Moreau River, South Dakota; San Juan Basin, New Mexico; (2) Greasewood Dome, near Jackson Reservoir, Morgan County, Colorado

Shimer and Shrock, Index fossils of North America, 1944, p. 117

Formation: Upper Cretaceous (Pierre, Fox Hills)

Location: South Dakota, Montana, Wyoming, New Mexico

— *americana* var. *multicostata* Stephenson

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 119, pl. XX, fig. 6

Formation: Montana group (upper part)

Location: Mingusville, Montana

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 251, pl. XIII, fig. 9

Formation: "Probably upper Montana group . . ."

Location: ". . . perhaps from the locality 20 miles southwest of Mingusville, Montana."

— *arkansasensis* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 245, pl. XV, figs. 21, 22

Formation: Taylor (Upper Marlbrook marl)

Location: Arkadelphia, Clark County, Arkansas

— *coronula* Goldfuss (also see *Micrabacia americana*)

Meek and Hayden, Phil. Acad. Nat. Sci. Proc., vol. 12, 1860, p. 430, (name only)

Formation: Cretaceous

Location: Nebraska

— *cribraria* Stephenson

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 117, pl. XX, figs. 1-3

Formation: (1) Black Creek (*Exogyra ponderosa* zone); (2) Ripley; (3) Selma Chalk

Location: (1) North Carolina; (2) Alabama; (3) Lee County, Mississippi

Stephenson, North Carolina Geol. and Econ. Survey, vol. 5, Pt. 1, 1923, p. 66, pl. IX, figs. 15-17

Formation: (1) Black Creek (Snow Hill calcareous member); (2) Lower Ripley (Upper *Exogyra ponderosa* zone); (3) Lower Selma Chalk (Upper *Exogyra ponderosa* zone)

Location: (1) Whiteley Creek Landing, Neuse River, North Carolina; Kerr's Cove, Black River, North Carolina; (2) Union Springs at "Conecuh Falls", Alabama; cut of Georgia Railway, half mile west of Union Springs, Alabama; (3) Tupelo Road, west of Fulton, Lee County, Mississippi

Wade, U. S. Geol. Survey, Prof. Paper 137, 1926, p. 27, pl. I, figs. 9, 10

Formation: (1) Ripley; (2) Black Creek (Snow Hill marl member); (3) Ripley (*Exogyra ponderosa* zone); (4) Selma Chalk (Upper *Exogyra ponderosa* zone)

Location: (1) Dave Week's place on Coon Creek, McNairy County, Tennessee; (2) Whiteley Creek Landing, Neuse River, North Carolina; Kerr's Cove, Black River, North Carolina; (3) Union Springs at "Conecuh Falls", Alabama; (4) Tupelo road, Lee County, Mississippi

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 244

Formation: (1) Black Creek (Snow Hill calcareous member); (2) Selma Chalk

Location: (1) Whiteley Creek Landing, Neuse River, North Carolina; Kerr's Cove, Black River, North Carolina; (2) Tupelo road, Fulton, Lee County, Mississippi

Shimer and Shrock, Index fossils of North America, 1944, p. 117, pl. XLVI, figs. 14, 15

Formation: Upper Cretaceous (*Exogyra ponderosa* zone)

Location: Atlantic and eastern Gulf Coastal Plain

MICRABACIA Milne Edwards and Haime, 1849 — *Continued*— *hilgardi* Stephenson

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 120, pl. XXII, figs. 1-6

Formation: Ripley (*Exogyra costata* zone)

Location: Union County, Mississippi; Eufaula, Alabama; Quitman County, Georgia

Wade, U. S. Geol. Survey, Prof. Paper 137, 1926, p. 26, pl. I, figs. 3, 4, 6-8

Formation: Ripley (*Exogyra costata* zone)

Location: Dave Week's place on Coon Creek, McNairy County, Tennessee; Lee's Old Mill site, Keownville, Union County, Mississippi; Eufaula, Alabama; Mercer's Mill Creek, Georgetown, Georgia; Chattahoochee River, Eufaula, Alabama

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 238

Formation: *Exogyra costata* zone

Location: Keownville, Union County, Mississippi; Eufaula, Alabama; Mercer's Mill Creek, Georgetown, Georgia; Chattahoochee River, Eufaula, Alabama; Coon Creek, McNairy County Tennessee

Shimer and Shrock, Index fossils of North America, 1944, p. 117, pl. XLVI, figs. 7-10

Formation: Upper Cretaceous (*Exogyra costata* zone)

Location: Gulf Coast

— *hilgardi* var. *occidentalis* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, Formation: Navarro

Location: Corsicana, Navarro County, Texas; Kaufman, Kaufman County, Texas

— *marylandica* Stephenson

Stephenson, Md. Geol. Survey, Upper Cretaceous, 1916, p. 755, pl. XLVIII, figs. 1-4

Formation: Monmouth (*Exogyra costata* zone)

Location: Prince George's County, Maryland

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 121, pl. XXII, figs. 7-10

Formation: Monmouth

Location: Prince George's County, Maryland

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 240

Formation: Monmouth (*Exogyra costata* zone)

Location: Prince George's County, Maryland

— *mineolensis* Stephenson

Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 122, pl. XXIII, figs. 6-8

Formation: Navarro

Location: Wood County, Texas

- Adkins, Handbook of Texas Cretaceous fossils, Texas, Univ.,
Bull. no. 2838, 1928, p. 77
Formation: Navarro (probably)
Location: Wood County, Texas
- Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 252, pl. XV, figs. 8-13
Formation: Navarro
Location: Mineola, Wood County, Texas; Onion Creek, Travis
County, Texas; Big Caddo Creek, Quinlan, Hunt County, Texas
- *mississippiensis* Stephenson
Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 123,
pl. XXIII, figs. 9-11
Formation: Ripley (*Exogyra costata* zone)
Location: Union County, Mississippi
Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 247
Formation: *Exogyra costata* zone
Location: Keownville, Union County, Mississippi
- *navarroensis* Wells
Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 241, pl. XV, figs. 16, 17
Formation: Navarro
Location: Lockhart, Caldwell County, Texas
- *rotatilis* Stephenson
Stephenson, Md. Geol. Survey, Upper Cretaceous, 1916, p. 753,
pl. XLIX, figs. 1-4
Formation: Monmouth
Location: Prince George's County, Maryland
Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 119,
pl. XXI, figs. 1-4
Formation: Monmouth
Location: Brightseat, Maryland
Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 242
Formation: Monmouth
Location: Prince George's County, Maryland
Shimer and Shrock, Index fossils of North America, 1944,
p. 117, pl. XLIII, figs. 11-13
Formation: Upper Cretaceous (*Exogyra costata* zone)
Location: Maryland
- *rotatilis* var. *georgiana* Stephenson
Stephenson, U. S. Geol. Survey, Prof. Paper 98, 1916, p. 120,
pl. XXI, figs. 5-8
Formation: Ripley (upper part of *Exogyra costata* zone)
Location: Georgetown, Quitman County, Georgia
Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 243

MICRABACIA Milne Edwards and Haime, 1849 — *Continued*

Formation: *Exogyra costata* zone

Location: Mercer's Mill Creek, near Georgetown, Quitman County, Georgia

— *stephensoni* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 246, pl. XV, figs. 18-20

Formation: Upper Taylor marl

Location: Cottonwood Creek, Manda, Travis County, Texas; Kimbro, Travis County, Texas; Brushy Creek, Williamson County, Texas

— *taylorensis* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 248, pl. XV, figs. 1-7

Formation: (1) Taylor marl; (2) basal Taylor

Location: (1) Mustang Creek, Taylor, Williamson County, Texas; Austin, Travis County, Texas; San Marcos, Hays County, Texas; (2) Big Walnut Creek, Sprinkle, Travis County, Texas

MICROSTIZIA Meek, 1876

Meek, U. S. Geol. Survey Terr. (Hayden), vol. 9, 1876, p. 4, pl. XXVIII, figs. 2, a, b, c

— *millepunctata* Meek

Meek, Smiths. Misc. Coll. 7 (177), 1864, p. 2, (name only)

Formation: Cretaceous

Location: Nebraska

Meek, U. S. Geol. Survey Terr. (Hayden), vol. 9, 1876, p. 4, pl. XXVIII, figs. 2, a, b, c

Formation: Fox Hills group

Location: Moreau River, Nebraska

MONTASTREA de Blainville, 1830

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 173, pl. XXIX, figs. 5, 6

— *cubana* Wells

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 293, pl. II, fig. 3

Formation: Caribbean Upper Cretaceous

Location: Central Perseverancia, Santa Clara Province, Cuba

MULTICOLUMNASTRAEA Vaughan, 1899

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 235, pl. XXXVII, figs. 5-7; pl. III, fig. 1

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 174, pl. XXX, fig. 3

— *cyathiformis* (Duncan) (also see *Heliastrea cyathiformis* and *H. exsculpta*)

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol.

Ser. 4), 1899, p. 236, pl. XXXVII, figs. 5-7, pl. III, fig. 1

Formation: Upper Cretaceous limestone

Location: Catadupa, Mount Hindmost, District of Clarendon, Jamaica

Vaughan, U. S. Natl. Mus., Bull. 103, 1919, p. 194, (name only)

Formation: Catadupa

Location: Jamaica

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 90

Formation: Rudistid limestone

Location: Logie Green section, Jamaica

PARACYATHUS Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 206, pl. XLI, figs. 10-12

— *kayserensis* Vaughan

Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 63, pl. X, figs. 5-5b

Formation: Lance (Cannonball marine member)

Location: Kayser, North Dakota

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 117, (name only)

Formation: Lance (Cannonball marine member)

Location: North Dakota

— *lloydii* Vaughan

Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 62, pl. X, figs. 3-3b

Formation: Lance (Cannonball marine member)

Location: Leith, North Dakota

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 117, (name only)

Formation: Lance (Cannonball marine member)

Location: North Dakota

— *thomi* Vaughan

Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 63, pl. X, figs. 4-4b

Formation: Lance (Cannonball marine member)

Location: Leith, North Dakota

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 117, (name only)

Formation: Lance (Cannonball marine member)

Location: North Dakota

PARACYATHUS Milne Edwards and Haime, 1848 — *Continued*— *vaughani* Weller

Weller, Geol. Survey of N. J., Paleontology Series, vol. 4, Pt. 2, 1907, p. 270, pl. V, figs. 11-13

Formation: Navesink marl

Location: Mullica Hill, New Jersey

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 218

Formation: Navesink marl

Location: Mullica Hill, New Jersey

— ? sp. Trechmann

Trechmann, Geol. Mag. 785, vol. 66, 1929, p. 485, pl. XVIII, figs. 11, 12

Formation: Blue Mountain shale

Location: Blue Mountain Peak, Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72, (name only)

Formation: Upper Cretaceous

Location: Jamaica

PARACYCLOLITES Wells, 1933

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 197, pl. II, fig. 19; pl. X, figs. 5-8

— sp. aff. *P. elizabethae* Wells (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

PARACYCLOSERIS Wells, 1934

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 85, pl. III, figs. 5-10; pl. V, figs. 1, 2

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 135, pl. XVII, fig. 6

— *elizabethae* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 86, pl. III, figs. 5-10; pl. V, figs. 1, 2

Formation: Upper Cretaceous

Location: Catadupa, Jamaica

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, Formation: (1) Caribbean Upper Cretaceous; (2) Cardenas beds

Location: (1) Central Perseverancia, Santa Clara Province, Cuba; Madruga, Havana Province, Cuba; Catadupa, Jamaica;
(2) San Luis Potosi, Mexico

PARASMILIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 217, pl. XLIV, fig. 6

Shimer and Shrock, Index fossils of North America, 1944, p. 121, pl. XLV, figs. 30-32

— *balanophylloides* Bolsche

Bolsche, Zeitschr. deutsch. geol. Ges., vol. 22, 1870, p. 215

Formation: Upper Cretaceous

Location: Woodbury, New Jersey

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 222

Formation: Marshalltown clay

Location: Woodbury, New Jersey

PLACOCOENIA d'Orbigny, 1849

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 174

— ? n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

PLATYTROCHUS Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 212, pl. XLIII, fig. 2; pl. XLV, figs. 9-12

Shimer and Shrock, Index fossils of North America, 1944, p. 121, pl. XLV, figs. 20, 21, 24-26

— *speciosus* Gabb and Horn (also see *Trochocyathus woolmani*)

Johnson, Geol. Survey of N. J., Ann. Rpt. of the State Geologist, 1897 (1898), p. 265, (name only)

Formation: Matawan clay-marls

Location: Mount Laurel, New Jersey

Johnson, Phil. Acad. Nat. Sci. Proc., vol. 50, 1898, p. 462, (name only)

Formation: Matawan clay-marls

Location: Mount Laurel, New Jersey

— *vaughani* (Stephenson) (also see *Trochocyathus vaughani*)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 122, pl. XII, fig. 4; pl. XIV, figs. 13, 14

Formation: Monmouth (*Exogyra costata* zone)

Location: Brightseat, Prince George's County, Maryland

PLEUROCORA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 173, pl. XXIX, fig. 3

PLEUROCORA Milne Edwards and Haime, 1848 — *Continued*

— n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

PORITES Link, 1807

— *reussiana* Duncan

(also see *Goniopora reussiana*)

Duncan, Quart. Jour. Geol. Soc. London, vol. 21, 1865, pp. 7, 8,
12, pl. I, fig. 2

Formation: Upper Cretaceous

Location: Upper Clarendon district, Jamaica

Duncan, Quart. Jour. Geol. Soc. London, vol. 24, 1868, p. 25,
(name only)

Formation: Cretaceous

Location: Jamaica

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol.
Ser. 4), 1899, p. 249

Formation: Upper Cretaceous limestone

Location: Upper Clarendon district, Jamaica

PRODIPLOASTREA Wells, 1934

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 88,
pl. IV, figs. 21, 22

— *schindewolfi* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 89,
pl. IV, figs. 21, 22

Formation: Upper Cretaceous limestone

Location: Cambridge-Catadupa railway cut, Jamaica

RHABDOPHYLLIA Milne Edwards and Haime, 1851

— *quaylei* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 76,
pl. II, figs. 3, 4

Formation: Rudistid limestone overlying the Trappean shales

Location: Cambridge-Catadupa railway cut, Jamaica

SIDERASTREA de Blainville, 1830

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 126, pl. II,
fig. 3; pl. XIII, figs. 1-5

- *cretacea* (Bolsche) (also see *Astraea cretacea*)
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 226, pl. XII, fig. 13; pl. XV, fig. 26
 Formation: (1) Marshalltown clay; (2) lowest Navarro
 Location: (1) Woodbury and Haddonfield, New Jersey; (2)
 Cameron-Burlington road, Milam County, Texas

STENOCYATHUS Pourtales, 1871

- *alabamiensis* Wells
 Wells, Bull. Am. Paleontology, vol. 31, no. 123, Pt. 3, p. 167,
 pl. I, figs. 6-11
 Formation: Prairie Bluff chalk
 Location: Linden, Marengo County, Alabama

STEPHANOCOENIA Milne Edwards and Haime, 1848

- Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 104, pl. V,
 fig. 7
- *fairbanksi* Vaughan
 Vaughan, U. S. Geol. Survey, Mon. 39, 1900, pp. 32, 151, pl.
 XVII, figs. 10-11a
 Formation: Doubtfully Cretaceous
 Location: Southern California
- *fairbanksi* var. *columnaria* Vaughan
 Vaughan, U. S. Geol. Survey, Mon. 39, 1900, pp. 32, 151, pl.
 XVII, figs. 10, 11
 Formation: Doubtfully Cretaceous
 Location: Southern California

STERIPHONOTROCHUS Vaughan, 1900

- *leithensis* Vaughan
 Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 64,
 pl. X, figs. 6-6b
 Formation: Lance (Cannonball marine member)
 Location: Leith, North Dakota
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 117, (name only)
 Formation: Lance (Cannonball marine member)
 Location: North Dakota
- ? *manorensis* Wells
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 123, pl. XIV, fig. 21
 Formation: Middle Navarro
 Location: Manor, Travis County, Texas

STIBORIOPSIS Vaughan, 1899

- Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol.
 Ser. 4), 1899, p. 237, pl. XXXVIII, fig. 4
- *jamaicaensis* Vaughan
 Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol.

STIBORIOPSIS Vaughan, 1899 — *Continued*

Ser. 4), 1899, p. 238, pl. XXXVIII, figs. 2-4

Formation: Blue Mountain series

Location: Carigie Parish, Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 72,
(name only)

Formation: Upper Cretaceous

Location: Jamaica

SYNASTREA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 132, pl. XVI,
fig. 5

— ? *adkinsi* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 87,
pl. III, fig. 14, 15

Formation: Upper Cretaceous limestone

Location: Cambridge-Catadupa railway cut, Jamaica

— n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

TRECHMANNARIA Wells, 1935

Wells, Annals and Mag. Nat. History, 10th ser., vol. 15, no.
86, 1935, p. 189, pl. XI, figs. 2, 3

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 133

— *montanarocae* Wells

Wells, Annals and Mag. Nat. History, 10th ser., vol. 15, no.
86, 1935, p. 190, pl. XI, figs. 2, 3

Formation: Upper Cretaceous limestone

Location: Mooretown, Jamaica

TROCHOCYATHUS Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 205, pl. XLI,
figs. 7-9

Shimer and Shrock, Index fossils of North America, 1944, p.
121, pl. XLIV, figs. 14-16; pl. XLV, figs. 1-10

— *californianus* Vaughan

Vaughan, U. S. Geol. Survey, Mon. 39, 1900, pp. 32, 96, pl.
VII, figs. 10-13

Formation: Cretaceous

Location: San Joaquin coal mine, California

- *dakotaensis* Vaughan
 Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 61,
 pl. X, figs. 1-1b
 Formation: Lance (Cannonball marine member)
 Location: Kayser, North Dakota
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 117, (name only)
 Formation: Lance (Cannonball marine member)
 Location: North Dakota
- *egerius* (White) (also see *Caryophyllia johannis* and *C. egerius*)
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 210, pl. XII, figs. 1-3; pl. XIV, figs. 1-3
 Formation: (1) Pierre shale; (2) Lewis shale
 Location: (1) Sage Creek, upper Yampa River, northwestern
 Colorado; Dry Creek, Black Hills, South Dakota; (2) Terrible
 Creek, northwestern Colorado
 Shimer and Shrock, Index fossils of North America, 1944, p.
 121, pl. XLV, figs. 3, 4
 Formation: Upper Cretaceous (Pierre, Lewis)
 Location: Western Interior of the U. S. A.
- *gardnerae* Wells
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 217, pl. XIV, figs. 8-10
 Formation: Navarro
 Location: Onion Creek, Travis County, Texas; Currie, Na-
 varro County, Texas; Corbet, Navarro County, Texas
- *matleyi* Wells 1932 (MS)
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 109, (name only)
 Formation: Upper Cretaceous
 Location: Jamaica
 Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 74,
 pl. II, figs. 5, 6
 Formation: Hard, calcareous, blue, concretionary mudstone
 Location: Blue Mountain Peak, Jamaica
- *mississippiensis* Wells
 Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
 p. 216, pl. XIV, figs. 22, 23
 Formation: *Exogyra ponderosa* zone
 Location: West Point, Mississippi
- sp. cf. *T. mississippiensis* Wells
 Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941,
 p. 295
 Formation: Caribbean Upper Cretaceous
 Location: Central Perseverancia, Santa Clara Province, Cuba

TROCHOCYATHUS Milne Edwards and Haime, 1848 — *Continued*— ? *neumani* Vaughan

Vaughan, U. S. Geol. Survey, Prof. Paper 128-A, 1920, p. 62,
pl. X, figs. 2-2c

Formation: Lance (Cannonball marine member)

Location: Kayser, North Dakota

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 117, (name only)

Formation: Lance (Cannonball marine member)

Location: North Dakota

— *oregonensis* Nomland

Nomland, Calif. Univ. Pub., Dept. Geol. Bull., vol. 9, 1916,
p. 63, pl. IV, figs. 9, 10

Formation: Lower Chico

Location: Forty-nine mine, Jackson County, Oregon

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 117, (name only)

Formation: Chico series

Location: West coast

— *pergranulatus* Nomland

Nomland, Calif. Univ. Pub., Dept. Geol. Bull., vol. 9, 1916,
p. 64, pl. III, figs. 16, 17

Formation: Chico

Location: Mount Diablo, Contra Costa County, California

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 117, (name only)

Formation: Chico series

Location: West coast

— *taylorensis* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 215, pl. XIV, figs. 11, 12

Formation: Basal beds of Taylor marl

Location: Walnut Creek, Austin, Texas; Austin-Manor road,
Travis County, Texas

— ? *vaughani* Stephenson (also *Platytrochus vaughani*)

Stephenson, Md. Geol. Survey, Upper Cretaceous, 1916, p. 752,
pl. XLVIII, figs. 5, 6

Formation: Monmouth (*Exogyra costata* zone)

Location: Prince George's County, Maryland

— *woolmani* Vaughan (also see *Platytrochus speciosus*)

Vaughan, Phil. Acad. Nat. Sci. Proc., vol. 52, 1900, p. 436,
figs. 1-3

Formation: Matawan clay-marls

Location: Mt. Laurel, New Jersey

Johnson, Phil. Acad. Nat. Sci. Proc., vol. 57, 1905, p. 4, (name
only)

Formation: Cretaceous

Location: (not given)

Weller, Geol. Survey of N. J., Paleontology Series, vol. 4, Pt. 2, 1907, p. 268, pl. V, figs. 5-7

Formation: Woodbury Clay

Location: Mt. Laurel, New Jersey

Felix, Fossilium Catalogue, pars 7, 1914, p. 209, (name only)

Formation: Obere Kreide (Matawan Clay Marls)

Location: New Jersey

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 213, pl. XIV, figs. 4-7

Formation: (1) Matawan clay marls; (2) Ripley; (3) Navarro (*Exogyra cancellata* zone)

Location: (1) Mt. Laurel, New Jersey; (2) Chattahoochee River, Columbus, Georgia; (3) Corbet, Navarro County, Texas; Corsicana, Navarro County, Texas

Shimer and Shrock, Index fossils of North America, 1944, p. 121, pl. XLV, figs. 5-7

Formation: Upper Cretaceous (*Exogyra cancellata* zone): Ripley and Taylor

Location: New Jersey, Georgia, Texas

— sp. aff. *T. woolmani* Vaughan

Stephenson, U. S. Geol. Survey, Prof. Paper 90, 1914, p. 81, (name only)

Formation: Peedee Sand

Location: Charleston, South Carolina

TROCHOSERIS Milne Edwards and Haime, 1849

Vaughan, U. S. Natl. Mus. Proc., vol. 28, no. 1401, 1905, p. 384

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 122

— *catadupensis* Vaughan

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 242, pl. XXXIX, figs. 5, 6

Formation: Upper Cretaceous limestone

Location: Catadupa, Jamaica

Vaughan, U. S. Natl. Mus., Bull. 103, 1919, p. 194, (name only)

Formation: Catadupa

Location: Jamaica

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 78, pl. II, figs. 9, 11

Formation: (1) Limestone; (2) shale under the rudistid limestone

TROCHOSERIS Milne Edwards and Haime, 1849 — *Continued*

Location: (1) Near Catadupa, Jamaica; (2) Cambridge-Catadupa rarilway cut, Jamaica

Wells, Bull. Am. Paleontology, vol. 26, no. 97, Feb. 17, 1941, p. 288, pl. I, fig. 1

Formation: Rudistid limestone

Location: Matanzas, Matanzas Province, Cuba; Catadupa, Jamaica

— n. sp. Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 111, (name only)

Formation: Cardenas beds

Location: San Luis Potosi, Mexico

TROCHOSMILIA Milne Edwards and Haime, 1848

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 185, pl. XXXIV, fig. 5

— ? *granulifera* Gabb

Gabb, Calif. Geol. Survey, Paleontology, vol. 1, 1864, p. 208, pl. XXVI, figs. 196, 196a

Formation: Division A

Location: Near Chico Creek, California

Gabb, Calif. Geol. Survey, Paleontology, vol. 2, 1869, p. 254, (name only)

Formation: Chico group

Location: Chico Creek, California

Nomland, Calif. Univ. Pub., Dept. Geol. Bull., vol. 9, 1916, p. 60, (name only)

Formation: Upper Cretaceous

Location: Pacific coast

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 117, (name only)

Formation: Chico series

Location: West coast

— *hilli* Vaughan

Vaughan, Harvard Coll., Mus. Comp. Zool., Bull. 34 (Geol. Ser. 4), 1899, p. 233, pl. XXXVI, figs. 1-4

Formation: Upper Cretaceous limestone

Location: Catadupa, Jamaica

Vaughan, U. S. Natl. Mus., Bull. 103, 1919, p. 194, (name only)

Formation: Catadupa

Location: Jamaica

— *moorei* Wells

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 219, pl. XIV, fig. 30

Formation: Mancos shale

Location: Henrieville, Garfield County, Utah

— *nodosa* Wade (also see *Wadeopsammia nodosa*)

Wade, U. S. Geol. Survey, Prof. Paper 137, 1926, p. 26, pl. I, figs. 1, 2, 5

Formation: Ripley

Location: Dave Week's place on Coon Creek, McNairy County, Tennessee

VAUGHANOSERIS Wells, 1934

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 80, pl. III, figs. 11-13; pl. V, fig. 3

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 185, pl. XXXIV, fig. 6

— *catadupensis* Wells 1932 (MS)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 109, (name only)

Formation: Rudistid limestone

Location: Jamaica

Wells, U. S. Natl. Mus. Proc., vol. 83, no. 2975, 1934, p. 81, pl. III, figs. 11-13; pl. V, fig. 3

Formation: Upper Cretaceous

Location: Catadupa, Jamaica; Cambridge-Catadupa railway cut, Jamaica

WADEOPSAMMIA Wells, 1933

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 227, pl. XII, figs. 14, 15; pl. XV, figs. 23-25

Vaughan, Geol. Soc. Am. Spec. Paper 44, 1943, p. 235

— *nodosa* (Wade) (also see *Trochosmilia nodosa*)

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 228, pl. XII, figs. 14, 15; pl. XV, figs. 23-25

Formation: (1) Ripley; (2) Navarro

Location: (1) Coon Creek, McNairy County, Tennessee; (2) Mustang Creek, Williamson County, Texas

WEBSTERIA Milne Edwards and Haime, 1854

Meek, U. S. Geol. Survey Terr. (Hayden), vol. 9, 1876, p. 2

— *cretacea* Meek and Hyden

Meek, Smiths. Misc. Coll. 7 (177), 1864, p. 2, (name only)

Formation: Cretaceous

Location: Dakota

Meek, U. S. Geol. Survey Terr. (Hayden), vol. 9, 1876, p. 3, pl. XXVIII, figs. 3, a, b, c

Formation: Fox Hills group

Location: Cheyenne River near the Black Hills

INDETERMINATE SPECIES

— “small slender coral”

Meek, Phil. Acad. Nat. Sci. Proc., vol. 8, 1856, p. 286, (name only)

Formation: Upper Cretaceous

Location: Ft. Pierre and Missouri River, Nebraska Territory

— “small discoid coral”

Meek, Phil. Acad. Nat. Sci. Proc., vol. 8, 1856, p. 286, (name only)

Formation: Upper Cretaceous

Location: Bear and Sage Creeks, Fox Hills, Nebraska Territory

— unidentified sp.

Logan, Kans. Univ. Geol. Survey, vol. 4, 1898, p. 443, (name only)

Formation: Ft. Benton group (Lincoln marble horizon)

Location: Lincoln County, Kansas

— “undetermined coral”

Woodring, Geology of the Republic of Haiti, 1924, p. 98, (name only)

Formation: Limestone of Massif du Nord

Location: Arrondissement of Cap-Haitien, Haiti

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 120, (name only)

Formation: Anona chalk

Location: Arkansas

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 120, (name only)

Formation: Ozan marl

Location: Sevier County, Arkansas

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 120, (name only)

Formation: Blossom sand

Location: Lamar County, Texas

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 120, (name only)

Formation: Wolfe City sand

Location: Collin County, Texas

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933, p. 120, (name only)

Formation: Selma chalk
Location: Alabama, Mississippi

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 120, (name only)

Formation: Selma chalk (*Exogyra costata* zone below *Liopistha protexta* subzone)

Location: Alabama, Mississippi

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 120, (name only)

Formation: Selma chalk (*Liopistha protexa* subzone)

Location: Alabama

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 120, (name only)

Formation: Basal Selma chalk

Location: Alabama

— indeterminate sp.

Wells, Bull. Am. Paleontology, vol. 18, no. 67, Aug. 3, 1933,
p. 120, (name only)

Formation: Selma chalk (top)

Location: Alabama

PLATE

PLATE

Distribution of the species of North American Upper Cretaceous corals, with reference to the distribution of Late Cretaceous land masses and seaways.



