LIST OF FOSSILS, TYPES AND FIGURED SPECIMENS, USED IN THE PALÆONTOLOGICAL WORK OF R. P. WHITFIELD, SHOWING WHERE THEY ARE PROBABLY TO BE FOUND AT THE PRESENT TIME.

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(Read November 21, 1898.)

INTRODUCTORY INFORMATION.

THE accompanying catalogue is of the types and other specimens described and used in the palæontological work done by R. P. Whitfield in the several reports and papers published under his name, from time to time, with the exception of those described and figured in the bulletins and memoirs of the American Museum of Natural History, in New York City. Of all the forms used in the museum publications by R. P. Whitfield, the originals are to be found in the museum collections. Consequently it has not been deemed necessary to burden the catalogue by including them.

The generic and specific names given in the catalogue are those under which they are published, and it has not been considered desirable to attempt to refer them to more recently adopted names given or proposed by various authors.

The first column gives the name under which the species or specimen is described. The second column gives a citation of the work where it is to be found. The third column gives the name of the collection or institution where the specimen is supposed to be at the time of publication, or at the present time (1898), so far as known to the writer. The fourth column mentions the geological formation to which the specimen or

specimens used were referred at the time of their publication; and the last column, the locality from which they were obtained, so far as known to the author.

The specimens stated to belong to the Wisconsin State collection, which was located at Madison, Wis., were mostly destroyed by fire some years ago, when the state buildings at that place were partially destroyed. Many of the Cretaceous fossils (mostly bivalves) given as being at Trenton, N. J., were destroyed by fire and water at the capitol at Trenton soon after the publication of the first volume of the New Jersey Palæontology.

Among the lamellibranchiate fossils in the State Museum at Albany and in the American Museum of Natural History in New York are many species, the authors of which are stated to be "H. & W." These species and several genera were written by R. P. Whitfield, under an agreement of joint authorship with Prof. James Hall, but published in an anonymous pamphlet entitled "Preliminary Notice of the Lamellibranchiate Shells of the Upper Helderberg, Hamilton and Chemung Groups, with Others from the Waverly Sandstones. (Preparatory for the Palæontology of New York.) Part 2." See the initials, R. P. W., on pp. 84, 91, 93, of the pamphlet. The species are not entered in this catalogue, but they and the genera referred to will be found appended thereto.

The writer commenced the compilation of this catalogue many years ago, under the impression that it would be an aid to other workers, to know where such specimens described and figured in different publications were to be found, as he has very often felt the need of such knowledge of forms which he has needed to compare with, or refer to, in course of his own work.

A list of the abbreviations used for the institutions or collections and of those used for the geological formations will be found appended.

Each specimen was originally marked with a small emerald-green paper ticket, to indicate that a drawing had been made of it for publication.

LIST OF ABBREVIATIONS OF WORKS CITED IN
THE CATALOGUE.

- Am. Jour. Conch., Vol. 1. American Jour. Conchology,
Vol. I. Philadelphia, Pa. 8vo. 1865.
- Expl., B. H. Rept. on the Geol. and resources of the Black
Hills of Dakota, 1880. Henry Newton and Walter P. Jen-
ney. 4to. Washington, D. C. 1880. Preliminary notice
publish. 1877.
- Geol. of Wis., Vol. 4. Geol. of Wisconsin, Vol. IV. 1882.
For the years 1873-1879.
- Ludlow's Rept., 1874. Report of a Reconnaissance of the
Black Hills of Dakota, made in the summer of 1874. Wil-
liam Ludlow. Washington, D. C. 1875. 4to.
- Ludlow's Rept., 1875. Reconnaissance from Carrol, Montana,
to the Yellowstone Park and return, 1875. William Lud-
low, U. S. A. Washington, D. C. 1876. 4to.
- Mioc. N. J. Mollusca and Crustacea of the Miocene forma-
tions of New Jersey. 4to. Washington, D. C. R. P.
Whitfield, U. S. Geol. Surv. Monograph XXIV.
- N. Y. Acad. Sci., Vol. 5. Annals N. Y. Acad. Sci., Vol. II.,
No. 8. 1882.
- Pal. N. J., Vol. 1. Rept. on the Brachiopoda and Lamelli-
branchiata of the Raritan Clays and Greensand Marls of New
Jersey. Trenton, N. J. 4to. 1886. Monograph IX., U.
S. Geol. Surv., 1885.
- Pal. N. J., Vol. 2. Gasteropoda and Cephalopoda of the Rari-
tan Clays and Greensand Marls of New Jersey. By R. P.
Whitfield. 4to. Trenton. 1892. Monograph XVIII., U. S.
Geol. Surv., 1891.
- Pal. Ohio, Vol. 2. Rept. of the Geol. Surv. of Ohio, Vol. II.
Columbus, Ohio. 1874. 4to.
- Proc. B. S. N. H. Proceedings of the Boston Soc. Nat. His-
tory. Pp. 289-306 of Vol. for 1862.
- Trans. Am. Inst. Min. Engineers. Transactions of the Am.
Inst. Mining Engineers, Vol. XIX. Appendix, pp. 103-106.

- 23d, 24th, 27th St. Cab. Annual Reports of the Regents of the Univ. on the New York State Cabinet of Nat. Hist. at Albany, N. Y. 1870 onward.
- 40th Paral. Surv. U. S. Geol. Expl. of the 40th Parallel. By Clarence King. Vol. IV. 4to. Washington. D. C. 1877.

ABBREVIATIONS USED TO DENOTE COLLECTIONS WHERE THE SPECIMENS MAY BE FOUND.

- A. M. N. H. American Museum of Natural History, New York City.
- A. N. Sci. Phil. Acad. Natural Sciences, Philadelphia, Pa.
- C. B. Andrews. Collection at Lancaster, Pa.
- Columbia College. Collection at Columbia University, New York City.
- Dr. Knapp. Formerly at Louisville, present location of specimens unknown.
- Dyer Coll. Collection of C. B. Dyer, now at Cambridge, Mass.
- High School, Whitewater, Wis. A collection formerly located in that High School.
- N. Y. St. Mus. State Cabinet of Nat. Hist. at Albany, N. Y., now known as the State Museum.
- Ohio St. Coll. State Museum at State University, Columbus, Ohio.
- Prof. J. Hall. Prof. Hall's Collection, made subsequent to the sale of his first collection to Am. Mus. Nat. Hist.
- Rutgers College. At New Brunswick, N. J., some of the specimens referred to this collection may be in Trenton and *vice versa*.
- Trenton. State Collection at Trenton, N. J., some of those thus referred may be at Rutgers College.
- Univ. Cal. State Univ. at Berkeley, Cal., in collection sold to them by R. P. Whitfield.
- U. S. Nat. Mus. U. S. National Museum, Washington, D. C.
- U. P. James. Of Cincinnati, Ohio.

White Coll. Collection sold to Michigan Univ., Ann Arbor, Michigan, by Dr. C. A. White.

Wis. St. Coll. State Collection formerly at Madison, Wis., part of which has been destroyed by fire.

ABBREVIATIONS USED TO DENOTE GEOLOGICAL FORMATIONS.

C. M. Coal measures.

Cret. No. 4. Number 4 of Meek & Hayden's Cretaceous section of the Upper Missouri regions = Dakota.

Chester. Chester limestones or Kaskaskia group.

Cret. L. M. Cretaceous Lower Marls of New Jersey.

Cret. M. M. Cretaceous Middle Marls of New Jersey.

Cret. U. M. or Up. M. Base of Upper Marls of New Jersey underlying the Farmingdale or Eocene beds.

H. R. or Hud. Riv. The Hudson River or Cincinnati beds.

L. Held. or L. Helderb. Lower Helderberg formations of New York.

L. Carb. Lower Carboniferous or Sub-carboniferous.

Quebec. Metamorphic or disturbed Lower Silurian beds, exact age not determined.

Up. Carb. Upper Carboniferous or Coal Measures.

Up. Helderb. Upper Helderberg limestone = Corniferous of Authors.