

- † *Aythya collaris*. 616. *Fulix collaris*.
 † *Oceanodroma homochroa*. 725. *Cymochorea homochroa*.
 † *Colymbus nigricollis californicus*. 733a. *Dytes nigricollis californicus*.
 † *Xanthocephalus xanthocephalus* (Bp.). 260. *Xanthocephalus icterocephalus*.
 † *Scolecophagus carolinus* (Müll.). 273. *Scolecophagus ferrugineus*.
 † *Empidonax fulvifrons pygmaeus* (Coes). 329. *Empidonax fulvifrons pallescens*.
 † *Dendroica vigorsii* (Aud.). 111. *Dendroica pinus*.
 † *Limosa limosa* (Linn.). [546.] *Limosa agocephala*.
 † *Tryngites subruficollis* (Vieill.) 556. *Tryngites rufescens*.
 † *Grus mexicana* (Müll.). 583. *Grus canadensis* (Linn.).
 † *Tringa couesi*. 531. *Arquatella couesi*.
 † *Sula sula* (Linn.). 652. *Sula leucogastra* (Bodd.).

A LIST OF THE ASTACIDÆ IN THE UNITED STATES NATIONAL MUSEUM.

By WALTER FAXON.

(Corrected to July 1, 1885.)

1. *Astacus fluviatilis* Rond.
 3229.* Central Germany.
 4137. Germany. 6 ♀.
 4134. Bohemia. Dr. Hessel. 4 ♂.
2. *Astacus pallipes* Lereb.
 10128. Montagny, Lake Neuchatel, Switzerland. Mus. Comp. Zoöl. 1 ♂, 1 ♀.
3. *Astacus torrentium* (Schrank) Wolf.
 4861. Bohemia.
4. *Astacus Gambelii* Ag.
 2536. Fort Hall, Idaho.
 3251. Teton Basin, Idaho.
 3227. Mouth of Yellowstone River.
 3249. Mouth of Yellowstone River.
 4396. Willow Creek [Wyoming Territory ?], Dr. Curtis, October 29, 1872.
 Young.
 4855. Santa Barbara, Cal. Dr. Webb. 6 ♂, 1 ♀.
5. *Astacus nigrescens* Stm.
 4974. San Francisco, Cal. Mus. Comp. Zoöl. 1 ♀.
 2267. California.
 2526. Fort Steilacoom, Wash. (Differs from the typical form. See Faxon, Revision of the Astacidæ).
 8954. Oonalaska, Alaska. W. H. Dall. 1 ♂.
6. *Astacus Trowbridgii* Stm.
 2080. Astoria, Oreg. Lieutenant Trowbridge. Types. 2 ♂, 2 ♀.
7. *Astacus leniusculus* Dana.
 2019. Columbia River. U. S. Explor. Exped. Type.
 2161. Locality unknown.
8. *Astacus Klamathensis* Stm.
 3881. Fort Walla Walla, Wash. Capt. Charles Bendire. 3 ♂, 2 ♀.
 4037. Fort Walla Walla, Wash. Capt. Charles Bendire. 8 ♂, 12 ♀.

* These numbers refer to the catalogue of Crustacea of the National Museum, in which the specimens are registered.

3899. Fort Walla Walla, Wash. 4 ♂.
 3568. Fort Walla Walla, Wash., 3 ♂, 12 ♀.
 3559. Fort Walla Walla, Wash. ♂, ♀ 12 +.
 9428. Fort Walla Walla, Wash. 2 ♂, 1 ♀.
 3166. Sikan Creek, Oreg.
 6673. Des Chutes River, Oreg.
 2072. Locality unknown. 1 ♂, 3 ♀.
 4862. Locality unknown.
 5042.* Locality unknown.

9. *Cambarus Blandingii* (Harlan) Erichs.

3301. Kinston, N. C.
 4148. Tarborough, N. C.
 3220. Wilmington, N. C.
 3572. Salmon Creek, N. C.
 3381. Near Columbia, S. C. M. McDonald.

Cambarus Blandingii (Harlan) Erichs.?

4888. Montgomery, Ala.
 4132. Montgomery, Ala.

10. *Cambarus Blandingii*, var. *acuta* Fax. (*C. acutus* Gir.)

5617. New Orleans, La.
 5505. Louisiana.
 3252. Tickfaw, La.
 3255. Tangipahoa River, Amite, La. P. Maxson, December 22, 1876.
 9315. Jackson Barracks, La. 1 ♂.
 4949. Mobile, Ala.
 4950. Mobile, Ala.
 4951. Blount Spring and Cullman, Sand Mountain, Ala.
 4491. Near Bridgeport, Jackson County, Ala.
 4875. South of Decatur, Ala.
 4127. Montgomery, Ala. Kumlein & Bean. 1 ♂.
 5499. Wheatland, Ind.
 3382. Wheatland, Ind. Robert Ridgway, April, May, 1881.
 3221. Aux Plains, Ill.? 1 ♂.
 4131. Illinois. G. W. Milner, 1876. 1 ♀.
 2164. Locality unknown. 25 +.

Cambarus sp.

5619. New Orleans, La. Dr. Shufeldt.
 9430. Arkadelphia, Ark. Jordan & Gilbert. 1 ♀.

11. *Cambarus fallax* Hag.

3182. Lake Jessup, Fla.
 4382. Indian River, Fla.
 3163. Near Titusville, Fla.
 4969. Saint John's River, Fla. Mus. Comp. Zool. 2.

12. *Cambarus Clarkii* Gir.

5618. New Orleans, La.
 3359. New Orleans, La. G. Dunbar's Sons. 3 ♂, 1 ♀.
 2261. New Orleans, La. G. Kohn. 1 ♂, 2 ♀.
 4859. New Orleans, La. Dr. R. W. Shufeldt, November 10, 1882. 1 ♀ with young.
 5502. Louisiana. Dr. Shufeldt.
 5507. Louisiana.
 3253. Tangipahoa River, La. Frederick Mather, August, 1875.
 4952. Ocean Springs, Miss.
 4512. Pensacola, Fla. Silas Stearns, May 31, 1882. ♂, ♀. 12+.

13. *Cambarus troglodytes* (Le C.) Hag.
4885. Near Columbia, S. C.
4053. Oakley, S. C. F. W. Hayward. 1 ♂, 1 ♀.
14. *Cambarus Lecontei* Hag.
4958. Mobile, Ala. Type. Mus. Comp. Zool. 1 ♂.
15. *Cambarus pubescens* Fax.
3181. McBean Creek. Ga. A. Graves. Types. 1 ♂, 1 ♀.
16. *Cambarus spiculifer* (Le C.) Hag.
4962. Athens, Ga. Mus. Comp. Zoöl. 1 ♂.
17. *Cambarus versutus* Hag.
4963. Spring Hill, Ala. Type. Mus. Comp. Zoöl. 1 ♂.
18. *Cambarus Wiegmanni* Erichs. ?
3288. Isthmus of Tehuantepec. Prof. Sumichrast. 1 ♀.
19. *Cambarus pellucidus* (Tellk.) Erichs.
4852. Mammoth Cave, Ky. Peter Parker, 1858. 1 ♂.
4970. Mammoth Cave, Ky. Mus. Comp. Zoöl. 1 ♀.
9314. White Cave, Ky. 3 ♀.
20. *Cambarus simulans* Fax.
4150. East of Canadian River. Types.
5500. Shoal Creek, near Austin, Tex.
21. *Cambarus advena* (Le C.) Hag.
4964. Georgia. Mus. Comp. Zoöl. 1 ♀.
22. *Cambarus gracilis* Bundy.
6672. Davenport, Iowa. Young.
4960. Decatur, Ill. Mus. Comp. Zoöl. 1 ♂.
23. *Cambarus Cubensis* Erichs.
10129. Near Havana, Cuba. Mus. Comp. Zoöl. 1 ♂, 1 ♀.
24. *Cambarus Bartonii* (Fab.) Gir.
5624. Fulton Lakes, N. Y.
8949. Bainbridge, Penn.
3335. Carlisle, Penn. ?
4863. Spring Creek, Caledonia.
4955. Rock Creek, D. C.
5621. Rock Creek, D. C.
3180. Rock Creek, D. C.
4620. Rock Creek, D. C.
4621. Rock Creek, D. C.
6670. Washington, D. C.
6669. Washington, D. C.
6668. Locality unknown.
5622. Clarke County, Va.
4128. Holston River, Smyth County, Va.
4886. Kinston, N. C.
9383. Doe River., Carter County, Tenn. H. Hemphill. Var. *longirostris*
Fax. 3 ♀.
25. *Cambarus Bartonii* var. *robusta* Fax. (*Cambarus robustus* Gir.).
5623. Fulton Lakes, N. Y.
4961. Forestville, N. Y. Mus. Comp. Zoöl. 1 ♂.
- Cambarus* sp.
4972. Mobile, Ala. Mus. Comp. Zoöl. 1 ♀.
5620. Milton, Fla.
4871. Near Ashland City, Tenn.

26. *Cambarus latimanus* (Le C.) Hag.
 3374. South Carolina? M. McDonald.
 3145. Near Columbia, S. C.
 4953. Blount Spring and Cullman, Ala.
 4954. Ocean Springs, Miss.
- Cambarus latimanus* (Le C.) Hag.?
 4877. Waterloo, Lauderdale County, Ala. C. L. Herrick.
 4874. Near Bridgeport, Jackson County, Ala.
 4492. Near Ashland City, Cheatham County, Tenn.
27. *Cambarus Diogenes* Gir.
 8946. Washington, D. C.
 3225. Wilmington, N. C.
 3298. Kinston, N. C.
 5625. New Orleans, La.
 5504. New Orleans, La.
 3373. Knox County, Ind.
 5492. Abingdon, Ill.
 4973. Decatur, Ill. Mus. Comp. Zoöl. 1 ♂.
 5501. Davenport, Iowa.
 2163. Locality unknown.
 2491. Locality unknown.
- Cambarus Diogenes* Gir.?
 4887. Kinston, N. C.
 4883. South of Decatur, Ala.
 2262. New Orleans, La.
 4078. Panama. 1 young ♂.
28. *Cambarus extraneus* Hag.
 4957. Tennessee River, near border of Georgia. Type. Mus. Comp. Zoöl. 1 ♀.
29. *Cambarus Girardianus* Fax.
 4882. Cypress Creek, Lauderdale County, Ala. C. L. Herrick, October, 1882. Types.
30. *Cambarus immunis* Hag.
 2323. White River, Ind.
 3223. Aux Plains, Ill.
 4866. Milwaukee, Wis. E. G. Blackford.
 3222. Near Laramie, Wyo.
 3257. Orizaba, Mexico.
 3570. Locality unknown.
31. *Cambarus immunis* var. *spinirostris* Fax.
 4655. Obion County, Tenn. Types.
32. *Cambarus Palmeri* Fax.
 4872. Obion County, Tenn. Edw. Palmer, May 30, 1882. Types.
 4654. Obion County, Tenn. Edw. Palmer, May 30, 1882. Types.
33. *Cambarus Alabamensis* Fax.
 4876. Waterloo, Lauderdale County, Ala. C. L. Herrick. Types. ♂, ♀. 25+.
34. *Cambarus compressus* Fax.
 4878. Waterloo, Lauderdale County, Ala. C. L. Herrick, October, 1882. Types.
 4879. Cypress Creek, Lauderdale County, Ala. C. L. Herrick, October, 1882. Type

35. *Cambarus affinis* (Say) Gir.

8947. Bainbridge, Pa.
 4853. Susquehanna River, Pa. F. G. Galbraith. 3 ♂.
 3842. Bainbridge, Pa.
 4126. Havre de Grace, Md.
 4854. Havre de Grace, Md. T. H. Bean. ♂, ♀. 12+.
 4904. Havre de Grace, Md. T. H. Bean.
 2081. Potomac River, Washington, D. C. Types of *C. Pealei* Gir. 2 ♂,
 2 ♀.
 8952. Potomac River, Washington, D. C.
 8951. Washington, D. C.
 8953. Washington, D. C.
 8955. Washington, D. C.
 8945. Washington, D. C. 1 ♀.
 8948. Washington, D. C. 1 ♂.
 3248. District of Columbia.
 4145. Potomac River, Gunston, Va.
 4146. Potomac River, Gunston, Va.
 4893. Potomac River, Gunston, Va. M. McDonald.
 2265. Potomac River, Va. ♂, ♀, 12+.
 8950. Locality unknown. 2 ♂, 1 ♀.

36. *Cambarus sloanii* Bundy.

4965. New Albany, Ind. Mus. Comp. Zoöl. 2 ♂.

37. *Cambarus propinquus* Gir.

6671. Grass River, Canton, N. Y.
 3226. Ogdensburgh, N. Y.
 4959. Forestville, N. Y. Mus. Comp. Zoöl. 1 ♂.
 2135. Rocky River.
 4851. Illinois. G. W. Milner.
 3250. Aux Plains River, Ill.
 4149. Northville, Mich.
 2160. Locality unknown.

38. *Cambarus propinquus*, var. *obscura*, Fax. (*Cambarus obscurus* Hag.)

4971. Genesee River, Rochester, N. Y. Type. Mus. Comp. Zoöl. 1 ♂.
 2531. California (?).

39. *Cambarus virilis* Hag.

4865. Illinois.
 4858. Historical Society, Manitoba.
 4857. Cedar Lake, Hennepin County, Minn. C. L. Herrick.
 4868. Cedar Lake, Hennepin County, Minn. C. L. Herrick.
 4869. Lake Independence, Minn. C. L. Herrick.
 4870. Bassett's Creek, Hennepin County, Minn. C. L. Herrick.
 4856. Milwaukee, Wis. E. G. Blackford.
 4900. Milwaukee, Wis. E. G. Blackford.
 4153. Souris River, Dak. Elliott Cones, 1873.
 4154. Souris River, Dak. Elliott Cones, 1873.
 3256. Souris River, Dak. Elliott Cones, 1873.
 2309. Souris River, Dak. Elliott Cones, 1873.
 3154. Red River of the North, near Pembina, Dak. Elliott Cones, May,
 1873. Types of *C. Couesi* Streets.
 9429. Des Moines River, Iowa. Jordan & Gilbert. 5.
 9431. Bedford, Iowa. Jordan & Meek. 1 ♀.
 2068. Laramie, Wyo.
 9427. White River, Eureka Springs, Ark. Jordan & Gilbert. 2 ♀.
 4873. Near Bridgeport, Jackson County, Ala.

Cambarus sp.

4867. Cheatham's Ferry, Lauderdale County, Ala.

40. Cambarus rusticus Gir.

4968. Cincinnati, Ohio. One of Hagen's types. Mus. Comp. Zoöl. 1 ♂.

4966. Lebanon, Tenn. Type of *C. placidus* Hag. Mus. Comp. Zoöl. 1 ♂.

9427. White River, Eureka Springs, Ark. Jordan & Gilbert. 1 ♀.

4967. Kentucky River, Little Hickman, Ky. Type of *C. juvenilis* Hag. Mus. Comp. Zoöl. 1 ♂.**41. Cambarus spinosus** Bundy.

4881. Cypress Creek, Lauderdale County, Ala. C. L. Herrick.

Cambarus sp.

4884. Georgia.

42. Cambarus Putnami Fax.

10130. Grayson Springs, Grayson County, Ky. Type. Mus. Comp. Zoöl. 1 ♂.

43. Cambarus forceps Fax.

4880. Cypress Creek, Lauderdale County, Ala. C. L. Herrick, October, 1882. Types.

44. Cambarus Montezumæ Saus.

4119. Lake San Roque, Trapnato, Mexico.

4864. Mexico.

45. Cambarus Shufeldtii Fax.

4860. Near New Orleans, La. Dr. R. W. Shufeldt, 1883. Types.

46. Cheraps Preissii Erichs. ?

4889. Sydney, Australia.

47. Parastacinæ, sp. nov.

4133. Colima, Mexico. J. Xantus.

A LIST OF THE FISHES KNOWN FROM THE PACIFIC COAST OF TROPICAL AMERICA, FROM THE TROPIC OF CANCER TO PANAMA.

By DAVID S. JORDAN.

Four hundred and seven species of fishes are now known to inhabit the waters of the Pacific coast of tropical America between Cape San Lucas and Panama. Our knowledge of these species is due chiefly to the studies of Dr. Gill, Dr. Günther, Dr. Steindachner, and Professors Jordan and Gilbert. Only a few collectors have given especial attention to the fish fauna of this region, but the work of these has in nearly all cases been of exceptional value.

The earliest extensive collections were made by Mr. John Xantus at Cape San Lucas, and later at Colima. The specimens obtained by Xantus comprise especially the fishes of the rock-pools. These were studied by Dr. Gill in 1862, and by Professor Gilbert and the writer in 1882. Many of the specimens collected by Xantus still remain unique.

The next collections were made in the bay of Panama, by Capt. John M. Dow, about 1862 to 1866. The first of these were sent to the Smithsonian Institution, where they were studied by Dr. Gill. Later, still