

roundish light spots on the colored side, and the black of the tail ocellated with white.

14. *Tetrodon testudineus* L.

(*Tetrodon annularis* Jenyns; *Tetrodon heraldi* Gthr.)

30944. A single small specimen.

UNITED STATES NATIONAL MUSEUM, June 28, 1882.

LIST OF FISHES COLLECTED AT PANAMA, BY REV. MR. ROWELL,
NOW PRESERVED IN THE UNITED STATES NATIONAL MUSEUM.

By DAVID S. JORDAN and CHARLES H. GILBERT.

At some time about the year 1860, a collection of fishes was sent from Panama to the Smithsonian Institution, by Rev. Mr. Rowell. The following is an enumeration of the specimens belonging to this collection, now preserved in the United States National Museum:

1. *Ælurichthys pinnimaculatus* Steind.
31004. One specimen, 20 inches long.
2. *Arius elatturus* Jor. & Gilb.
30995. One specimen.
3. *Arius insculptus* J. & G.
30977. Two specimens, in fair condition.
4. *Hemirhamphus poeyi* Günther.
31019. One specimen, answering well to Günther's description of this species, which has not been hitherto noticed on the Pacific coast of Central America.
5. *Muraena pinta* J. & G.
7328. One specimen.
6. *Rhypticus nigripinnis* Gill.
(*Rhypticus nigripinnis* Gill, Proc. Ac. Nat. Sci. Phila. 1861, 53.)
3700. The original type of the species, 3½ inches long, in bad condition, evidently identical with the adult specimen later described as *Promicropterus decoratus*, and with the young example called *Rhypticus maculatus*.
7. *Centropomus armatus* Gill.
One specimen, 7 inches long.
8. *Pomadasys branicki* (Steind.) J. & G.
7499. One specimen, 3 inches long.
9. *Diabasis flaviguttatus* (Gill.) J. & G.
31005. Two specimens, 8½ inches in length.
10. *Apogon dovii* Günther.
6268. Two specimens, in bad condition.

11. *Micropogon altipinnis* Günther.

3010. A young specimen, in bad condition.

12. *Gerres peruvianus* C. & V.

5717. One specimen.

Two species allied to the present one occur in the West Indies, and all three have been called *Gerres rhombeus* by authors. One of these, evidently the *Gerres rhombeus* C. & V., has but two anal spines; the other, *Gerres rhombeus*, or *Mojarra rhombea* Poey (= *Gerres olisthostoma* Goode & Bean Mss.), has the ovate groove for the reception of the premaxillary processes completely covered with scales. In *Gerres peruvianus*, as in most species of *Gerres*, this region is entirely naked. There are also minor differences in the length of the fins. We have never seen a specimen with two anal spines on the Pacific coast of tropical America, but the two-spined species (*rhombeus*) is common at Aspinwall.

13. *Citharichthys spilopterus* Günther.

30996. Three specimens, in poor condition.

UNITED STATES NATIONAL MUSEUM, *June 30, 1882.*

ON A COLLECTION OF BIRDS FROM THE HACIENDA "LA PALMA,"
GULF OF NICOYA, COSTA RICA.

By C. C. NUTTING.

[WITH CRITICAL NOTES BY R. RIDGWAY.*]

Costa Rica, the southernmost of the Central American States, lies between the eighth and eleventh degrees north latitude, quite a considerable portion being actually south of Panama, owing to the peculiar curve of the continent between Costa Rica and South America proper.

Like all the Central American States, Costa Rica is characterized by comparatively low coast regions, with a rugged interior composed of mountains which reach an altitude of nearly 11,000 feet, as is the case with the volcanoes of "Irazu" and "Turrialba," and elevated valleys sometimes of considerable extent, as the valleys of San José and Cartago.

These physical characteristics render the region a most fertile one for the naturalist, who finds in this favored field vegetable and animal life varying with the altitude of his collecting ground, and embracing both tropical and temperate forms.

On the 13th of February, 1882, I landed in Punta Arenas, the only important point on the Pacific coast of Costa Rica. Although my instructions were to direct my efforts principally to the region of the

*The editor of this paper is responsible for the determination of the species, the nomenclature adopted, and all critical notes.—R. R.