Article VIII.—ON A NEW RACE OF MINNOW FROM THE ROCKY MOUNTAINS PARK.

By John Treadwell Nichols.

Rhinichthys cataractæ smithi subsp. nov.

Rhinichthys dulcis Eigenmann, Bull. U. S. F. C., XIV (for 1894), p. 111. Type locality: Hot Spring at Cave and Basin, Banff, Alberta.

Type specimen. No. 5514, American Museum of Natural History, specimen in alcohol, collected July 21, 1915, by Harlan I. Smith.

Geographic range. Probably in suitable localities throughout South Saskatchewan drainage, Alberta.

General Characters. Resembles R. cataractæ dulcis but differs notably in the fewer scales in lateral line (50 to 60).

Description of type. Total length 44 mm.; length to base of caudal 38 mm. Head (in latter measure) $3\frac{4}{5}$; depth $4\frac{3}{4}$. Eye (in head) $5\frac{1}{2}$; snout $2\frac{4}{5}$; maxillary 3; interorbital $2\frac{4}{5}$. Dorsal 8; anal 7. Scales in lateral line 53. Body fusiform, not much compressed, eye small, snout long, projecting beyond the inferior horizontal mouth, premaxillaries not protractile, maxillaries barely reaching front of eye, with a well developed terminal barbel. Pharyngeal teeth (of right side) 42, hooked. Lateral line complete. Insertion of dorsal distinctly behind that of ventrals, about equidistant between base of caudal and front of eye, slightly nearer the latter. Caudal moderately forked 1.3 in head; longest dorsal ray 1.5; longest anal ray 1.6; pectorals extending $\frac{2}{3}$ distance to ventrals; ventrals $\frac{3}{4}$ distance to caudal. Color in spirits clouded by dark punctulations except on the ventral surface which is white, a blackish band from snout to caudal, almost as wide as eye on middle of side, scarcely half as wide on snout, fins pale, the caudal slightly clouded.

Specimens examined. The type and 4 paratypes, 47 to 30 mm. in total length, and about 25 young, also paratypes, down to 15 mm. in total length. One of this size has head $3\frac{1}{2}$, depth 4. Color pale, the lateral band narrow and faint, ending in a sharp black spot. The largest specimen (47 mm.) has the head $3\frac{2}{3}$, depth $4\frac{1}{3}$, eye about $\frac{1}{2}$ snout. Scales about 60. The two next largest paratypes have scales about 50.

Remarks.— The presumption is that this is the fish recorded by Eigenmann as dulcis from Medicine Hat, Calgary, and Banff. Named for the collector, Mr. Harlan I. Smith, of the Victoria Memorial Museum, Ottawa, in recognition of his broad interest in the natural science of the region where it is found. The occurrence of a species characteristic of swift, cool waters in hot springs is interesting, in fact record of fishes in such places is sufficiently rare for their occurrence there to be worthy of remark.²

¹ Eigenmann, C. H. Results of Explorations in Western Canada and the Northwestern United States.

² See Nichols, Bull. Am. Mus. Nat. Hist., XXXI, 1912, p. 179, Cuba.

