OBSERVATIONS ON THE MEDICINAL AND ECONOMIC VALUE OF THE OULACHAN (OSMERUS PACIFICUS, RICH.), A FISH BELONGING TO THE FAMILY SALMONIDÆ, FOUND ON THE NORTH-WEST COAST OF AMERICA.

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The fish which forms the subject of this communication may, if we consider its importance to the Indians, or the still more useful purposes to which both the fish itself and its oil might be applied, without fear of contradiction be ranked as one of the most valuable products of the western shores of America. Many of the earlier fur-traders and adventurers refer to it in enthusiastic terms under its Chinook name of Oulachan or Eulachon,* and give accounts of its abundance in the Columbia River early in this century. All readers of Washington Irving's charming 'Astoria,' cannot fail to remember his description of it. It belongs to the family Salmonidæ, and is usually classed in Gerard's genus Thaleicthys, but as I believe that that genus is separated from the older one of Osmerus on very insufficient grounds, I have preferred to designate it as Osmerus pacificus. The synonymy and specific characters will therefore stand as follows:—

Osmerus pacificus (Salmo (Mallotus) pacificus), Richardson Fauna Boreali-Americana; Thaleicthys Stevensi, Gerard, Gen. Rep. on Fishes; Thaleicthys pacificus, "Grd." Cooper and Suckley Natural History of Washington Territory, Plate LXXV. figs. 1-4; Osmerus pacificus, (Rich.), Ayres, Proceedings Cal. Acad. Nat. Science, ii. 64. Head subconical and pointed. Mouth large; posterior extremity of maxillar bone extending to a vertical line drawn posteriorly to the orbit. Eye rather small. Adipose fin placed opposite the posterior portion of the anal, which is rather elongated. The insertion of the ventral fins is situated considerably in advance of the anterior margin of the dorsal. Scales moderate, subelliptical. Dorsal region greyish-clive; middle of flank yellowish-orange, dotted with black; belly yellowish, unicolor; upper sides and surface of head greyish; fins unicolor.

^{*} Ross Cox calls it "the sweet little anchovy" ('The Columbia River,' etc., vol. i. p. 105). It is also spelt hoolakan and Ulichan. Alexander Ross calls it the "fathom fish." because strung on threads in their dried condition, they were sold by the fathom ('Adventures of First Settlers on the Columbia River,' p. 94).