

the head in Ganoids, between the eyes and the gills, possess a few gill-filaments, and have not lost their branchial function. There is no accessory or opercular gill, such as we find in the Sturgeon and *Lepidosteus* on the posterior face of the hyoid arch; but a pseudobranchia distinct from a true opercular gill occurs. In spite of its name *Polyodon* has no teeth. They are present in the young: but disappear as the fish grows. It is said to frequent only the dark and deeper parts of the rivers and lakes where it occurs, and both on account of its structure and habits is a singular type amongst fishes. It has, as already pointed out, many exceptional features distinguishing it from its Ganoid allies, and would never be ranked by an ordinary observer with the Sturgeon, the Bow-fin (*Amia*) or the Bony Pike or Bill-fish (*Lepidosteus*) of our own waters or with the *Polypterus* of the Nile and Senegal, or with the African *Calamoichthys*, from Calabar. To the scientific eye they all belong to one group, one of the most interesting groups in the whole range of Zoology. The Ganoids on the one hand possess features of the Shark tribe (e.g. the many-valved conus arteriosus, the heterocercal tail, and the intestinal valve), while they exhibit features which are equally typical of the Teleosts or Bony Fishes, viz.: free pectinate gills, an operculum, a permanent mesonephros, and the production of small spherical eggs in considerable quantity. They are a generalised type of fishes, and of great antiquity, as geological evidence demonstrates. Hence their morphological and palæontological importance.

SALSOLA KALI TRAGUS.

A few specimens of "Russian Thistle" were found this summer by Mr. W. T. Macoun, the Horticulturist at the Experimental Farm, in a field of Alfalfa sown last year. The Alfalfa seed was purchased in Ottawa, but though the "thistle" has ripened its seed there is no danger of its spreading or becoming the noxious weed it is in the west. It is only on the prairies that it is to be feared.