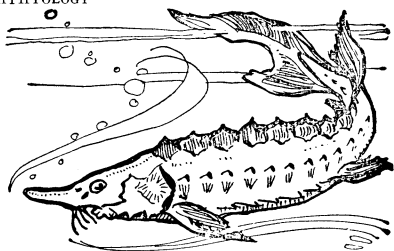




ICHTHYOLOGY



Sturgeon

THE sturgeon is a freshwater fish, but you will find him only in goodsized lakes and in big rivers, for he is a big fish and needs room for the proper expression of his style. He will furnish the ambitious fisherman with a fine fight; but as for eating afterwards, that's a matter of taste. Some like him and some don't. But the roe of Mrs. Sturgeon becomes caviar, which you are supposed to like, even if you don't, or have never tasted it.

Looked at with a curious eye, the sturgeon has much about him that reminds one of a shark. Arrangement of fins, shape of tail, general outline of body, mouth on underside of pointed, shovel-shaped snout—there is something decidedly and uncomfortably reminiscent about the whole business. Also, his fierceness and his voracious appetite, and his vicious behavior when hooked, all recall memories of sharkiness.

There is some right and reason in this. The sturgeon belongs to a primitive order of fishes, the ganoids. These were the fishes that in the remote ages before the coal beds were formed populated the seas with armor-plated monsters—veritable living submarine battle-ships. The rows of heavy scales along the sturgeon's back are relics of that time. These earliest of true bony fishes (for sharks have no true bones, only cartilages) were the monarchs of their time, but a newer race has crowded them out, so that only a few odd genera of the ganoids have lived through, and of these the only one worthy of recognition of a knight and a gentleman is the sturgeon.

Science News Letter, September 9, 1933

A shrimp spawns once in its life but may produce 800,000 eggs.

ENGINEERING

British Engineer Criticizes Development of American Car

THE QUESTION that bothers most prospective car purchasers is how they can tell the differences between and the advantages of the many almost identical automobiles in the medium price class. American manufacturers have lost sight of some of the important foreign automotive engineering developments and are proceeding along a narrow path of specialized improvement in detail, is the opinion of the British engineer, L. H. Pomeroy, Managing Director of the Daimler Company that produces the Baby Austin cars in England. Mr. Pomeroy talked before the Society of Automotive Engineers at Chicago.

The English criticisms of the American car range from too rapid depreciation caused by big horsepower to the opinion that the windows are too high. Although they grant that "one man's meat is another man's poison," some of their suggestions are worth considering.

Too Powerful

The premier contention is that the size of the engine has been developed out of all proportion to the requirements of rational performance. High speeds and high acceleration have been overemphasized and the comfort, spaciousness and luxury of the body have not kept pace with the stupendous power performance. Perhaps this has been due to the ease with which publicity departments can impress the public with spectacular figures.

English engineers feel that American designers have not taken advantage of the possibilities of considering the gear box as part of the engine. They feel that the motorist will secure as much enjoyment at less cost from driving with a lower powered car even if it is necessary to shift the gears more often.

The use of light alloys of aluminum and other metals that has become so common in European cars has been almost entirely neglected in this country. A light weight car means that the engine power can be cut down and the economy of operation increased. The saving of as much as 50 per cent. in

some of the heavy steel parts, such as axles, will entail an additional expense but past experience has shown that the consumer has always been willing to pay for a genuine improvement.

Engineering developments in Europe that are not attracting the attention that they should are methods of gear shifting, automatic variable-speed transmissions, fluid flywheels and supercharging.

British manufacturers are wondering if the American car is to hitch its wagon to the star of top-gear performance forever in spite of engineering developments which make this wasteful and unnecessary.

Science News Letter, September 9, 1933

ARCHAEOLOGY

Most Enticing Mounds To Be Opened in Fall

THE GREAT "South Terrace," perhaps the most enticing part of the acropolis of Monte Alban, because under its ancient hood of earth and vegetation it appears to be the best preserved part of the ancient city, will be the goal of the Mexican Monte Alban expedition headed by Dr. Alfonso Caso this autumn.

The acropolis is a tableland on top of the Alban Mountain. It is about a third of a mile long, lying roughly north and south. The "North Platform," which cuts the tableland off on the north, was excavated last year, as was the Dancer's Temple on the west, and (*Turn Page*)

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