erected, and projecting out of the water, and when quietly floating on the surface it can sail by the aid of the fin before the wind, like a boat.

The food of the swordfishes is the same as that of tunnies, and consists of smaller fish, and probably also in great measure of pelagic cuttle-fishes. It has been ascertained by actual observation that swordfishes procure their food by dashing into a school of fishes, piercing and killing a number of them with their swords; and this kind of weapon would seem to be also particularly serviceable in killing large cuttle-fish, like the saw of sawfishes, which is used for the same purpose. But the swords of the large species of *Histiophorus* and *Tetrapturus* are, besides, most formidable weapons of aggression. These fishes never hesitate to attack whales and other large cetaceans, and, by repeatedly stabbing them, generally retire from the combat victorious. That they combine in these attacks with the thresher-shark is an often-repeated story which is discredited by some naturalists on the ground that the dentition of the thresher-shark is much too weak to make an impression on the skin of any cetacean. The cause which excites swordfishes to such attacks is unknown; but they follow the instinct so blindly that they not rarely assail boats and ships in a similar manner, evidently mistaking them for cetaceans. They easily pierce the light canoes of the natives of the Pacific islands and the heavier boats of the professional swordfish fishermen, often dangerously wounding the persons sitting in them. Attacks by swordfishes on ocean-going ships arc so common as to be included among sea-risks: they are known to have driven their weapon through copper-sheathing, oak-plank and timber to a depth of nearly 10 in., part of the sword projecting into the inside of the ship; and the force required to produce such an effect has,been described by Sir R. Owen in a court of law as equal to “the accumulated force of fifteen double-handed hammers,” and the velocity as “ equal to that of a swivel-shot ” and “ as dangerous in its effects as a heavy artillery projectile.” Among the specimens of planking pierced by swordfishes which are preserved in the British Museum there is one less than a foot square which encloses the broken ends of three swords, as if the fishes had had the object of concentrating their attack on the same vulnerable point of their supposed enemy. The part of the sword which penetrates a ship’s side is almost always broken off and remains in the wood, as the fish is unable to execute sufficiently powerful backward movements to free itself by extracting the sword. ·

In the Mediterranean and on the Atlantic coasts of the United States the capture of swordfishes forms a regular branch of the fishing industry. The object of the fishery in the Mediterranean is the common European swordfish (*Xiphias gladius'),* the aver­age weight of which is about 1 cwt., and which is abundant off the Sicilian coasts and on the opposite coast of Calabria. Two methods are employed—that by harpoons, chiefly used for larger fish, and that by peculiarly constructed nets called *palamitare.* This fishery is very productive: a company of fishermen frequently capture from twenty to fifty fish in a single day, and the average annual catch in Sicily and Calabria is reported to be 140,o00 kilogrammes (138 tons). The products of the fishery are consumed principally in a fresh state, but a portion is preserved in salt or oil. The flesh of the swordfish is much preferred to that of the tunny, and always commands a high price. This species is occasionally captured on the British coast.

On the coast of the United States a different species, *Histio­phorus gladius,* occurs; it is a larger fish than the Mediterranean swordfish, attaining to a length of from 7 to 12 ft. and an average weight of 300 or 400 ft. It is captured only by the use of the harpoon. From forty to fifty vessels, schooners of some 50 tons, are annually engaged in this fishery, with an aggregate catch amounting annually to about 3400 swordfishes, of a value of $45,000. The flesh of this species is inferior in flavour to that of the Mediterranean species, and is principally consumed after having been preserved in salt or brine.

Useful and detailed information on the swordfish fishery can be obtained from A. T. Tozzetti, " La Pesca nei mari d’Italia e la

pesca all' estero esercitata da Italiani,” in *Catalogo esposizione internazionale di pesca in Rerlino* (1880) ; also from *La Pesca del pesce-spada netto Stretto di Messina* (Messina, 188o), and from G. Brown Goode, “ Materials for a History of the Sword-fish,” in *Report of the Commissioner of Fish and Fisheries,* pt viii. (Washington, 1883). (A. C. G.)

**SWYNFORD, CATHERINE** (c. 1350-1403), wife of John of Gaunt, duke of Lancaster, was a daughter of Sir Payne Roelt, a knight who came to England from Hainault in the train of Edward III.’s queen, Philippa. About 1367 she married Sir Hugh Swynford (1340-1372), a Lincolnshire man, by whom she had a son, Thomas (c. 1368-1433), who was a friend and com­panion of Henry IV. both before and after he came to the English throne. Soon after her husband’s death in 1372 Catherine became the mistress of John of Gaunt, and in 1396, nearly two years after the duke had become a widower for the second time, she was married to him at Lincoln. She died at Lincoln on the 10th of May 1403. By John of Gaunt Catherine had four children, all of whom were born before their marriage. They were declared legitimate in 1397 and took the name of Beaufort from one of their father’s castles in Anjou (see Beaufort).

**SYAGRIÜS (d.** 487), the last of the independent Roman administrators of Gaul, was the son of Aegidius, who had seized Gaul while Ricimer was master of Italy. From 464 to 486 he governed that part of Gaul which lies between the Maas, the Scheldt and the Seine, and was termed “ king of the Romans ” by the German invaders, Franks, Burgundians and Visigoths, who already occupied the rest of Gaul. Defeated in 486 by Clovis, king of the Salian Franks, at the battle of Soissons, Syagrius fled, leaving his land at the mercy of the Franks, He sought refuge with Alaric II., king of the Visigoths, at Toulouse, but Alaric imprisoned him instead of granting him refuge, and delivered him up to Clovis. He was executed in 487, secretly and by the sword, according to Gregory of Tours.

**SYBARIS,** a city of Magna Graecia, on the Gulf of Tarentum, between the rivers Crathis (Crati) and Sybaris (Coscile), which now meet 3 m. from the sea, but in ancient times had independent mouths, was the oldest Greek colony in this region. It was an Achaean colony founded by Isus of Helice (about 720 b.c.), but had among its settlers many Troezenians, who were ultimately expelled. Placed in a very fertile, though now most unhealthy, region, and following a liberal policy in the admission of citizens from all quarters, the city became great and opulent, with a vast subject territory and divers daughter colonies even on the Tyrrhenian Sea (Posidonia, Laus, Scidrus). For magnificence and luxury the Sybarites were proverbial throughout Greece, and in the 6th century probably no Hellenic city could compare with its wealth and splendour. At length contests between the democrats and oligarchs, in which many of the latter were expelled and took refuge at Crotona, led to a war with that city, and the Crotoniats with very inferior forces were com­pletely victorious. They razed Sybaris to the ground and turned the waters of Crathis to flow over its ruins (510 b.c.). Explora­tions undertaken by the Italian government in 1879 and 1887 failed to lead to a precise knowledge of the site. The only discoveries made were (1) that of an extensive necropolis, some 8 m. to the west of the confluence of the two rivers, of the end of the first Iron age, known as that of Torre Mordillo, the contents of which are now preserved at Potenza; (2) that of a necropolis of about 400 b.c.—the period of the greatest prosperity of Thurii *(q.v.)*—consisting of tombs covered by tumuli (called locally *timponi),* in some of which were found fine gold plates with mystic inscriptions in Greek characters; one of these tumuli was over 90 ft. in diameter at the base with a single burial in a sarcophagus in the centre.

See F. Lenormant, *La Grande-Grèce,* i. 325 seq. (Paris, 1881); F. S. Cavallari, in *Nolizie degli Scavi (1879, passim;* 1880, 68, 152); A. Pasqui, ibid. (1888), 239, 462, 575, 648; P. Orsi, in *Atti del con- gresso di scienze storiche,* v. 195 sqq. (Rome, 1904) (T. As.)

**SYBEL, HEINRICH VON** (1817-1895), German historian, sprang from a Protestant family which had long been established at Soest, in Westphalia. He was born on the 2nd of December 1817 at Düsseldorf, where his father held important posts in