THE SCIENTIFIC AMERICAN.

OYSTERS.

Anomalous as it may appear, this luscious mollusk has played a tremendous part in the history of the post Christian world. The Romans, we know, were fond or oysters, and an ingenious antiquarian might found a theory upon the resemblance that exists between the Roman short-sword and the modern oyster-knife, and suggest that the love of conquest in those ancient masters of the world was nothing but a desire for the most luscious of the genus Ostrea-that when the Belgæ were conquered, it was not for the kingdom, but the Huitres d' Ostend-and that the Rubicon was crossed, not to gain the island of Britain, but simply to possess the beds of London "natives," which imbibed their succulent life on the southern shores of that happy land. The Romans never enjoyed the taste of the genuine Carlingford, as that is an Irish oyster of a later date, and may boast of its never having yet succumbed to a foreign stomach.

Whether the above theory be true or not, one thing is positive, that in Britain a certain superstition prevails that oysters are unwholesome when there is no "R" in the cognomen of the month, and this has been brought over to this country, where it is believed in to such an extent, that on the 1st of May last, the business in this city fell off just one-half in 24 hours. There is, however, a reason for this, which, while it may hold good in England, is not tenable here. On the coasts of England, the difference in the temperature is so slight that all the oysters commence spawning at about the same period, namely, the month of June; and for about six weeks before becoming in that interesting condition, and some short time after it, they are not, of course, particularly luscious or delicate to the palate (whatever they may be in individual health); they become flabby and watery, and present, when cut, a milky appearance. But as the oysters which supply the markets of our principal cities come from a coast-line of over 6,000 miles, where there is every variety of temperature and habits of life, and the spawning season varies for every species, we can have oysters all the year round, good, succulent and juicy; and, at the same time, have those which it would be quite as unhealthy to eat in September as others in May. The only way to be sure of getting a good oyster is to go to a good dealer and pay a good price; and, trusting to his judgment, we may be sure that when we call for a "half-shell," we shall not be swallowing a crop which ought to have remained two or three years reposing on its rocky bed.

"But what is an oyster?" asks one of our readers, anxious to obtain some knowledge of his anatomy and habits; and, of course, all our other readers smile, and say: "I know--I've eaten hundreds. It's a-a-a-humph! let-me-see! Well, now, what is it?" or perhaps they could give the definition that a small cockney (a recent importation) gave us on one occasion, when we put the question to him, as he was looking earnestly into Downing's stand. "Ha hoyster," says he, "is ha fish; e's ha shilling ha dozen. Yer buys 'im hin the Fülton market, hand wery good 'e his." We gave him a dozen, thankful for the information.

To fully answer the question, we must have recourse to an illustration.



DIAGRAM.

An oyster is a mollusk or soft-bodied animal, provided with an external skeleton or shell, of hard calcareous matter. This sometimes takes queer shapes, as in the species known as the coxcomb-oyster, which inhabits the Indian ocean; and a near neighbor of his has a still more odd outward configuration—namely, the hammeroyster, on which two appendages to each side of the shell grow to a great length, and give it the appearance of a pick-ax or hammer. The class of molluska in which the oyster is placed is the *Lamellibranchiata*, and his near relations are the scallop and muscle. These *kamellibranchs* are so called because they all respire by

gills, in the form of membranes attached to the mantle or covering of the body. To thoroughly understand the structure of these soft-bodied animals, take an oyster, and, after opening it, let the reader refer to the accompanying diagram of a lamellibranch, and by a careful dissection with a pen-knife, he can see the shell-muscles, a, by which the shell is opened or closed; b, the ganglia or centers of the nervous system; c, the heat by which a circulation of the fluids of the body is kept up; d, the liver; e, the mouth; f, the labial tentacles or lips by which food is conveyed to the mouth proper; g, the foot (which will not be found in the oyster, but is present in the muscle); h, the stomach or digestive apparatus; i, the intestine; k, the anus; m, the mantle or covering of the body; n, the branchize or gills; o, the siphon through which liquids, air and food are conveyed into the body; and p, the siphon through which the same are thrown off from the body.

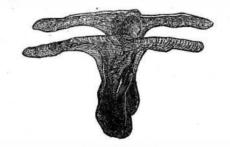
The fry of the oyster called "sprat," is a white gelatinous mass from which the young oysters rapidly free themselves, and fix themselves to the bed of the river or sea by the most convex shell. Most shells of this tribe are pearly in the interior; and as true pearls are merely morbid growth, they may all produce pearls of various



COXCOMB OYSTER.

qualities. The formation of pearls is caused by the introduction of irritating substances, such as grains of sand, between the mantle and the shell. The irritation causes the animal to cover the obnoxious object with layers of pearl, which generally attach the foreign body to the interior of the shell. The Chinese produce pearls artificially, by placing substances in such a position ; and on one occasion we saw a shell to the interior of which a small metal image was attached by the pearly secretion. The pearl-oyster, which is found in the Indian and Pacific oceans, at a depth of about 12 fathoms, furnishes the finest pearls, and the shells are known to us as mother-of-pearl.

The American oyster, although possessed of no greater facilities for locomotion than any other, is yet a great traveler, and like all his countrymen, partial to change



HAMMER OYSTER.

of scene, provided it be not too far north, as he does not like cold, and has a natural antipathy to ice; so that he attains the greatest perfection in such a climate as York river, Va., from which he is transported when young to some favorable ground (or water) on the coast of Staten Island, where he is dumped overboard and allowed to grow until wanted to supply the cravings of human beings. There are about 150 schooners, of 100 tuns burthen, employed as his method of locomotion, and he has at his command about 600 men. These northern waters are said to improve his flavor, and fit him for his entrance into polite-not society, but-stomachs. There is an excellent seed-oyster raked up from a small bay near Sing-Sing, on the Hudson river, which, when it is about the size of a quarter, is transferred to Long Island Sound, and called "East river." The trade in oysters is immense, 500,000 being sold weekly in Fulton market, and as many as 90,000 having been retailed from one stand in that shellfish-ic locality in six

A distinguished foreign writer on dietetics, says:-"The oyster is a species of food, combining the most precious alimentary qualities. Its meat is soft and delicate, yet has a peculiar firmness also. It has sufficient flavor to please the taste, but not enough to excite to surfeit. Through a quality peculiar to itself, it favors the intestinal and gastric absorption, mixing easily with other food, and assimilating with the juices of the stomach, it aids and favors the digestive functions. There is no alimentary substance, not even excepting bread, which does not produce indigestion under certain given circumstances, but oysters never. This is a homage due to them. They may be caten to-day, to-morrow, forever, in profusion; indigestion is not to be feared, and we may be certain that no doctor was ever called in through their fault. Of course, we except cooked oysters. Besides their valuable digestive qualities, oysters supply a recipe not to be despised in the liquor they contain, which is produced by the sea-water they have swallowed, but which, having been digested, has lost the peculiar bitterness of salt water. The ovster-water is limpid, and slightly saline in taste: and, far from being purgative, like sea-water, it promotes digestion." According to the theory of an anti-vegetarian friend of ours, the oyster can be eaten by the most humane. Meeting a vegetarian one day, he inquired: "Do you abstain from animal food because you object to take life?"

"I do," was the reply.

"Then," said our friend, "come and have an oystersupper. You have no occasion to kill them; you can swallow them alive."

Vegetarian vanished.

For much of the statistical information in this article we have to thank the New York *Tribune*, which a short time ago gave the statistics of the oyster-trade in this city.

MORE WONDERFUL THAN THE MAMMOTH CAVE.

Dr. D. L. Talbot. in commencing a series of articles for the Fort Wayne Times, in regard to the Wyandotte Cave, make the following comparison between Wyandotte and Mammoth Caves :- "Wyandotte Cave, one of the most extensive and remarkable in the world, is situated in Crawford county, Indiana, about 25 miles below New Albany, on Blue river. I have called it a The Mammoth Cave of Kentucky remarkablo cave. has hitherto been designated as the greatest known cave in the world. It may startle your scientific readers to hear me assert the fact, that there is one stalagmite alone in Wyandotte Cave more massive than all the stalagmites and stalactites in Mammoth Cave put together. This cave I have surveyed and mapped a distance of 25 miles in length, and there numerous avenues. I have never penetrated to their end, although I have visited the cave for scientific and other purposes, over a dozen different times, spending on one visit four days and nights within its darksome halls. The Mammoth Cave is distinguished more for its vastness than its beauty; the Wyandotte for its great extent, its mammoth hall, its lofty ceilings, reaching frequently to the height of 267 feet, and especially for its numerous and natural fountains, which almost continually meet the eye in every direction. A portion of this cave has been known and visited for over 40 years. This portion is about three miles in length, and is termed the Old Cave. In 1850 a new door from within the old cave was discovered, which extended the caves united to about 12 miles in extent. In 1853, a still newer discovery of ingress was accidentally made, which has added eight or ten miles thereto, and disclosed a plan of formation more extensive and more beautiful than heretofore known. The cave contains every kind of formation peculiar to the Mammoth and other caves, besides some unique formations found only in the Wyandotte Cave."

REMARICABLE PRESERVATION.—Some thirteen years ago, says the Freeport (III.) *Journal*, the mother of John W. Rogers (at present a resident of Jo Davis county) died and was buried in the town of Kent, in this county. Last month her children had her remains taken up and removed to Nora Cemetery, and what was their surprise to find them in a complete state of preservation. Her body was a solid petrifacation, her features being perfect as in life, only a shade or two darker.

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