

14. *Food Supply*.—Once settled for ever settled, until dredged up, the oyster must squat in a locality favourable for obtaining a proper food supply. The late Mr. Reade, a patient and learned microscopist, after examining the stomachs of oysters, says, "In the stomach of every oyster I examined, and in the alimentary canal, I found myriads of living monads; the 'vibrio' also in great abundance and activity, and swarms of a conglomerate and ciliated living organism, which may be named *Volvox ostrearius*, and great numbers of other creatures belonging to the Diatomaceæ, monads being those microscopic things found in dirty water and ponds. The family of Vibrionidæ include the eel-like microscopic animalcules found in stale paste, vinegar, &c., apparently belonging to the vegetable kingdom, according to Cohn, to which the Volvocinæ are also generally believed to belong. In fact, as Mr. Buckland says, "It is a question whether the food of the oysters are living animals, or whether they are the highest forms of vegetable life. By some it is said they are the lowest form of animal matter, which feed on decayed vegetable bodies; and I think the latter theory is probable, the fact being that the oyster lives upon the minutest organisms which exist in the ocean." Major Heath, writing with his practical experience of Corio Bay, Victoria, says, "All depends on the locality and food for the oyster, for unless you have blue clay somewhere near, or in the bed, they will starve." Blue clay being, I presume, in that locality, the most prolific of animalculæ.

15. *Growth*.—The growth of the oyster depends much on the locality; it grows very fast or very slowly, according to the water in which it is. In England it reaches its marketable size in from three to four years. In the Basin of Arcachon, in France, it is marketable when twenty-seven months old. In Corio Bay, Major Heath informs me "Sydney rocks" do well, making as much as one inch of shell in three months." To again quote Mr. Buckland, "The oyster grows from the inside by throwing out rings of a calcareous or else of a glassy substance. The growth of an oyster is by circles every year, and by practice you can make out when his growth begins and ends for the year. The oyster, according to Figuier, "is quite microscopic at the period of its discharge from the parent shell; at one month it is of the size of a large pea, at the end of six months it is about three-quarters of an inch, a year after its birth an inch and a-half to two inches, and finally, at the end of three years, it has become merchandize—that is to say, it is in a state to be sent to the parks for preservation and feeding."

16. *Nourishing Powers of Oysters*.—Oysters, according to Mr. Buckland, contain "hydrochlorate of soda, hydrochlorate of magnesia, sulphate of lime, sulphate of soda, and sulphate of magnesia. Much phosphate of iron and lime, much osmazone or creatine—which is the same thing as the essence of meat—a certain quantity of gelatine and mucus, which renders it so digestible, and an animal material of which phosphorus is the principal ingredient." Those whose labour lies in headwork will find that nothing puts them better into "form" than oysters; and, as Reveille Parise says, "There is no alimentary substance, not even excepting bread, which does not produce indigestion under given circumstances, but oysters never; one may eat them to-day, to-morrow, eat them always, and in profusion, without fear of indigestion."

17. *Meat Value*.—Mr. Buckland, after careful investigation, has calculated the value of the meat of the oyster, as compared with mutton, to be as follows:—Taking the best Whitstable natives, purchased at 3s. 6d. per dozen, the meat costs 9s. 4d. a pound; in the case of second-quality oysters, purchased at 2s. a dozen, the meat costs 8s. a pound, while good mutton can be bought for from 10d. to 1s. a pound. Thus to cheapen an article so wholesome for food, by increasing its production, will confer a very great public benefit.

18. *Points*.—The oyster, like most animals, has its good points. The most valuable class of oyster is that in which the shell is very thin, and feels to the touch like china; for the thinner the shell the more room there is for the meat, and the larger the proportion of the latter to the former, which in the best class is one-fourth of meat to shell; in the second, one-fifth; and in the third, one-sixth. The oyster should have a deep shell to hold the meat, should grow fast, and fatten readily.

19. *Friends*.—Heat and tranquillity may be considered the best friends an oyster has. The first assists and stimulates the parent oyster to brew and exude the spat, and both are necessary to enable the baby to live through its infancy. Shot as it were into life, if it is met with a cold embrace it withers and dies at once, while strong winds drive it to destruction. A single thunder storm has been known in England to destroy millions of spat floating in shallow water. Cleanliness means life to the baby oyster. It will not adhere to anything which is not clean; and unless it fixes itself within a given time after its birth it dies. Cleanliness is also necessary, though perhaps in a lesser degree, for the parent oyster, as dirt harbours its active enemies and in time chokes it. With calm sunny days in which to spat, and a hard clean bed to lie on, the parent and offspring cannot do otherwise than increase and multiply at a rate which, as has been proved in some parts of the world, is simply marvellous.

20. *Enemies*.—If the oyster requires few friends, the name of its enemies is "legion." Were it otherwise, the space it would occupy in the economy of nature, from its extraordinary prolificness, would prove inconvenient. Its enemies may be classed as inanimate and animate. Under the first head, the category may be considered as follows: Cold, which kills the spat; sand, which gets in between the lips of the oyster-shell and keeps them open, and which sometimes buries whole beds of oysters; wind and waves, the injurious effect of which has been previously described; mud, which smothers oysters; land floods, which seriously affect oyster beds in shallow water, the pure fresh water killing the oyster; sea weed and all marine weeds which foul the ocean bottom, and thus with the dirt they cause destroy the spat. Of the animate enemies of the oyster, the most formidable is the "five-fingers," or star-fish proper. Mr. Buckland says, "These creatures, I have ascertained by watching, open the oyster by catching hold of it by their five fingers, and they have the power to protrude from the centre of their disc an elastic stomach, and that elastic stomach gets in between the shells of the oyster and presses them open, and then the star-fish will eat up the inside of the oyster and leave it, as it is technically termed, "a clock"—that is to say, the two shells joined together, the meat of which has been eaten out by the star-fish." One of the worst features in this maritime robber is that if one of its fingers is broken off it will grow another, and indeed it is questionable whether the broken finger will not grow a whole body if thrown back into the sea. The