

## Artificial Pearl (Pearl formation (cont'd))

Japanese have developed a technique of producing pearls artificially by inserting foreign bodies, such as glass beads, into the mantle of oysters. The oysters are retained in wire cages or mats until pearls are produced, which can be later removed and sold in markets. This was Mikimoto's discovery which had made him a wealthy person. It takes about 3 to 4 years to produce a pearl of considerable size but a large one takes 7 years. Cultured pearls are genuine pearls but are less valuable than uncultured pearls which can be identified by experts. Imitation pearls are beads coated with an iridescent substance called pearl

essence that is obtained from scales of fishes. The best quality of pearl is known as "Lingha Pearl" obtained from marine oysters.

### Culture of Oysters

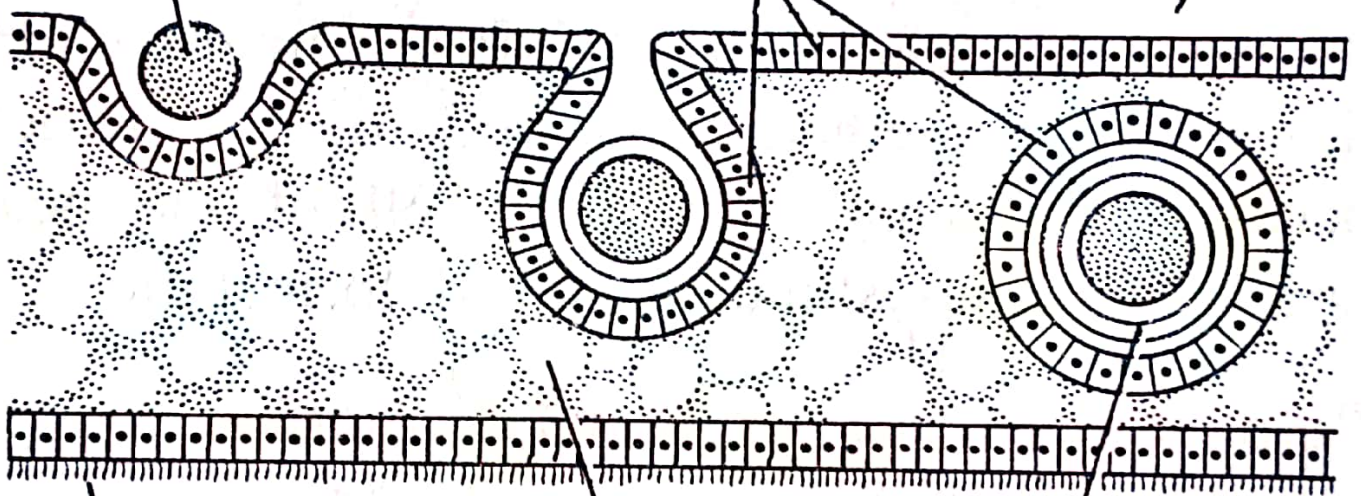
The ~~woman~~ divers in Japan are called "The Girls of the Sea". From early morning till ~~noon~~ moon, they collect the oysters from the bottom of the sea with the help of nets. Collection of oysters is best done in the two months of the summer season when the sea is calm and the water is nearer the shore. Oysters are collected, stocked and reared in rearing cages. Each cage is divided into 4-6, <sup>smaller</sup> chambers and is covered by with metal mesh provided with cotton netting. The oysters are cleaned before being placed in the culture cages for about 10 to 20 days for acclimatizing them to shallow water conditions. After which they are processed for artificial Pearl formation. (Fig)



foreign body  
(sand or a parasite)  
between shell  
and mantle

nacre  
secreting  
cells of  
mantle

nacreous layer  
(mother of pearl)  
of shell



ciliated  
epithelium  
of mantle

connective  
tissue

pearl formed by  
secretion around  
foreign body

**Fig. 17.** Stages in pearl formation.