Commercial Cork from *Quarks suber* (Cork Oak):

When secondary growth occurs in stems and roots, the epidermis is stretched and broken. **Periderm** is formed to provide a protective outer covering. Periderm arise from a lateral meristem called the **cork cambium**, which produces parenchyma cells to the inside and cork cells to the outside. The cork cells, cork cambium, and parenchyma cells formed from the cork cambium make up the periderm. In the cork oak, the cells are tightly arranged so there are no intercellular spaces. The cork cells are waterproofed with suberin and provide good thermal insulation, which may serve to protect tree stems from damage due to excessive heat or cold. From his study of cork, Robert Hook published an article in 1664 in which the term "cell" was used.

Commercial cork is obtained from *Q. suber,* which is native to the Mediterranean region. The first cork cambium arises in the epidermis and the cork produced from it is not commercially useful. When the tree is about 20 years old, the original periderm is removed, and a new cork cambium arises in the cortex. The cork produced by the new cork cambium accumulates very rapidly and after about 10 years is thick enough to be stripped. Once again a new cork cambium arises beneath the previous one, and after about another 10 years the cork can be stripped again. This procedure can be repeated at about 10 year intervals until the tree is approximately 150 years old. The spots and long dark streaks seen on the surfaces of commercial cork are lenticels.