

SEA SQUIRTS.

By Professor E. E. PRINCE, Commissioner of Fisheries, Ottawa.

No one who has spent a few hours on the sea shore, turning over weed-covered stones, can have failed to notice clusters of leathery objects, styled by the fishermen sea peaches, sea apples, sea potatoes, etc. They are of various shapes, as these names indicate, and differ in colour, some bright pink, others scarlet, or orange, or pure white, or stone colour, and other tints. Some strongly resemble leathery grapes, or coarse plums, or even small leather bottles, while many are semi-transparent, and not unlike green-glass flasks, one or two inches long. They cling by the base to stones and other objects, and frequently hang from the underside of shelving rocks, others are upright and stalked, resembling a brown potato on a long stem (like *Boltenia*), others are jelly-like colonies (such as *Amarousium*), and some occur as long strings of clear glassy creatures, floating as *Salpa* does, near the surface of the sea. On touching them they squirt out two thin jets of water, from an aperture at the top, and another at the side. They have the appearance of motionless vegetables, and are scientifically called Tunicates, or less accurately, Ascidians, but by more philosophical naturalists they have been dignified with the name Urochordates. They merit some notice in these pages for two reasons, viz:— their very special scientific interest, and for a second important reason, that they have formed the subject of some most remarkable original investigations by Dr. A. G. Huntsman, of the University of Toronto, a distinguished worker among our younger Canadian biologists. The high scientific interest possessed by the Tunicates, or Sea Squirts, arises from the fact that they have been looked upon as the ancestral progenitors of the human race (or rather of all vertebrates), and about them Andrew Lang wittily wrote:

"The ancestor remote of Man,
Says Darwin was the Ascidian."

The additions to our knowledge of Canadian Ascidians, due to Dr. Huntsman's labours, are a source of just pride to our scientists. Dr. Huntsman was trained under Professor Ramsay Wright, whose retirement from his Toronto chair zoologists on this continent will never cease to deplore. Laborious and successful work at the three Dominion Government biological stations, during many years, led to Dr. Huntsman's appointment by the Biological Board recently to the responsible position of curator in charge of the marine and fishery investi-