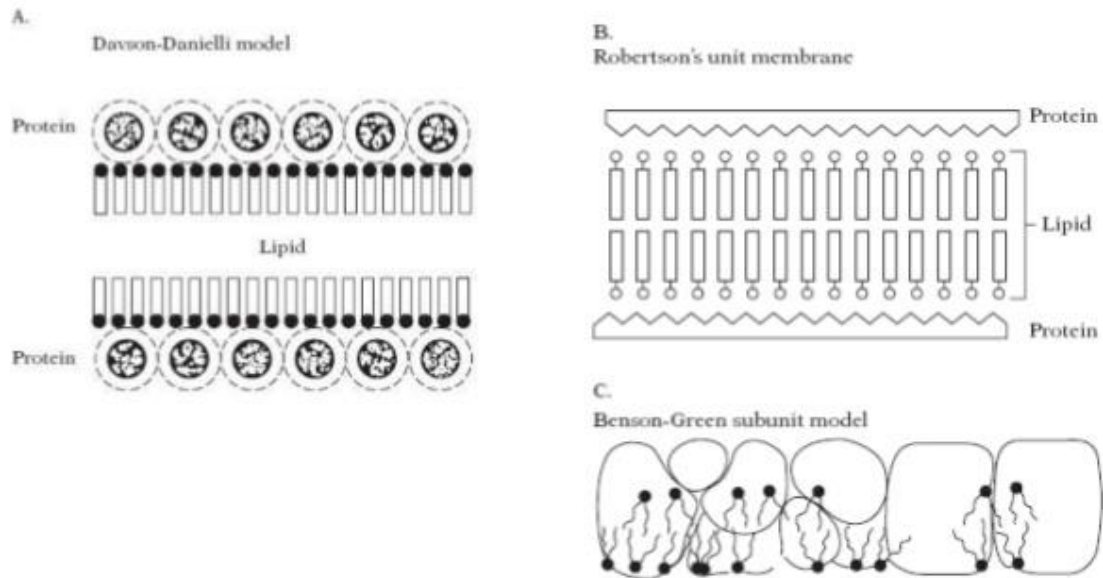


Figure 1.5 Early membrane models



SANDWICH MODEL

- The **Davson-Danielli model** was a model of the Plasma membrane of a cell, proposed in 1935 by Hugh Davson and James Danielli.
- The model describes a Phospholipid bilayer that lies between two layers of globular proteins.
- Davson-Danielli model was the first attempt to describe membrane structure in terms of molecules and to relate the structure to biological and chemical properties.

- According to bimolecular model of Danielli and Davson, plasma membrane .The polar **(hydrophilic) heads** of phospholipids are oriented towards the protein layers forming a hydrophilic zone.
- The nonpolar **(hydrophobic) tails** of phospholipids are oriented in between polar heads forming a hydrophobic zone.
- They theorised a **phospholipid** bilayer surrounded by two layers of proteins, on the inner and outer surfaces.