The Danielly-Davson Membrane Model (1935)
Cell membrane is made of a phospholipid bilayer sandwiched between two layers of globular protein.

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.

Though the phospholipid bilayer is probably accurate, there are problems with the Davson- Danielli model:

- Not all membranes are identical or symmetrical.
- Membranes with different functions also differ in chemical composition and structure.
- Membranes are bifacial with distinct inside and outside faces.
- A membrane with an outside layer of proteins would be an unstable structure.
- Membrane proteins are not soluble in water, and, like phospholipid, they are amphipathic.