

## SECTION I.

The ground-nut plant, *Arachis hypogaea*, Linn., belongs to the large natural order Leguminosae, sub order Papilionaceae, and produces the peanut of commerce. This is variously known under the names of earthnut, monkey nut, goober pea, Manila nut, pistache de terre, etc. The plant is an annual herb and is said to have originated in Brazil. In support of this belief it is stated that several species of the genus *Arachis* have been found growing spontaneously in that country, but the wild type has never been met with. It is very probable that the cultivated types have altered and improved, out of all recognition and are now totally different to, and no longer comparable with, the wild plant. The spread of the groundnut eastwards into Africa was in all probability effected or considerably helped by the slaving ships. There are two chief types in cultivation:-

- I. A running type with creeping or semi-prostrate branches.
- II. An upright type with stems more or less erect giving the plant a "bunched" appearance.

Within these two classes there are intermediate grades.

The plant has a clover-like aspect but the leaves are composed of four leaflets (and are not trifoliate as is often erroneously stated) which are carried on the leaf stalk in opposite pairs. The stems are usually round and of varying thicknesses but are in all cases pubescent and are extremely tough. The plant is a typical legume in that its root system carries numerous nodules containing the bacterium *pseudomonas radiculicola*, which lives in symbiosis with the plant and fixes atmospheric nitrogen. The flower is of the usual papilionaceous type, is bright yellow in colour, and is borne in the axils of leaves along the whole length

of the stem. When the fertilisation process is complete the peduncle lengthens and pushes the ovary into the ground. This process is known as "pegging" and is vital to the growth of the nut. The point of the ovary is sharp and is capable of penetrating even fairly hard soil but if for any reason it is prevented by soil conditions from burying itself the pods cannot develop. The fruit consists of a hard husk or pericarp marked by longitudinal rugae and encloses from one to four seeds according to the variety. The seeds are irregular in shape but are usually fairly cylindrical with more or less pointed ends except in cases where one end is flattened due to pressure against the adjacent seed. The thin skin or testa covering the cotyledons is pinkish in colour and bears vein-like markings.