

STEM.*The Ascending Axis of the Plant.***PARTS.****NODES.**—Points from which leaves arise (Fig. 7).**INTERNODES.**—Portions of the stem between the nodes (Fig. 7).**AXILS.**—The angles on the upper side between the leaves and the stem (Fig. 7.)**CLASS.****EXOGENOUS.**—Character of plants with exogenous stems.

(a) They have net-veined leaves (Fig. 8 B).

(b) The parts of the flowers are in fours or fives, very rarely in three or in sixes (Fig. 8 E.)

(c) They are outside growers, the wood forming in rings (Fig. 8 A).

(d) They are dicotyledonous (Fig. 8 C.) See Cellular Structure of Exogens, page 22.

(e) They have a true bark (Fig. 8 A d.)

ENDOGENOUS.—Character of plants with endogenous stems.

(a) They have, with few exceptions, straight-veined leaves Fig. 9 B.)

(b) The parts of the flower are in threes or in sixes, never in fives (Fig. 9 E.)

(c) They are inside growers, the wood being interspersed in separate bundles throughout the stem (Fig. 9 A.)

(d) They are monocotyledonous (Fig. 9 C). See Cellular Structure of Endogens, page 23.

(e) They have no true bark.

ACROGENOUS.—Character of plants with acrogenous stems.

(a) The leaves are fork-veined.

(b) They are flowerless.

(c) They are summit growers, the stem being formed by the union of the bases of fronds.

(d) They are acotyledonous.

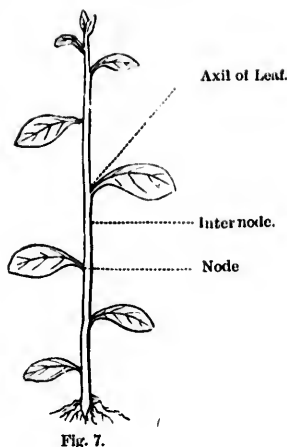
KIND.**AERIAL.**—Stems above ground.(a) *Caulis*, stem of ordinary herbaceous plants.(b) *Truncus*, stem of trees.(c) *Caudex*, stem of palms.(d) *Culm*, stem of grasses.(e) *Stipe*, the leaf stalk of ferns.**SUBTERRANEAN.**(a) *Rhizoma*, or *Rootstock*, a horizontally elongated, more or less subterranean stem, sending out roots from its lower side and leaf-buds from its upper (Fig. 10). Ex., Calamus, Solomon's Seal.

Fig. 7.



Fig. 8.

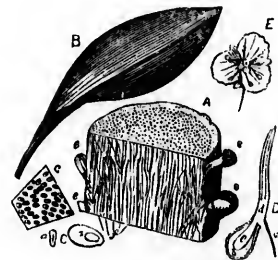


Fig. 9.



Fig. 10.