

neath the cap serve the important purpose of affording surface for the development of spore-bearing cells (basidia) known collectively as the hymenium. The cap or pileus is sometimes styled the hymenophore because of its bearing the hymenium. The spores shed from the basidia are of different sizes, shapes and colors, and afford important features for the determination of species. For instance, the family agaricaceae has been divided into five series, viz., leucosporae, rhodosporae, etc., according to the

(1) *Agaricus Campestris*, or Meadow Mushroom—This is the best known of all our mushrooms and the one usually cultivated artificially. Fig. 1990 presents a group in different stages of development. The second specimen from the left is one in the young or button stage. There is no volva or universal veil surrounding it, as illustrated in Fig. 1988; but there is a partial veil connecting the cap with the stem, and leaving when ruptured by the growth of the plant a ring or remnants of a ring upon the stem. The

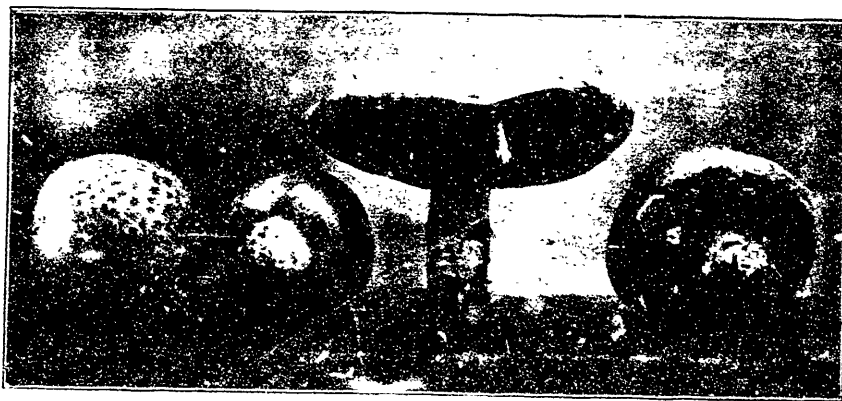


FIG. 1990. *AGARICUS CAMPESTRIS*.
(From Corliss, U. S. Department of Agriculture.)

color of the spores, whether white, pink, brown, purple, or black. The shape of the cap and the gills and their relation to the stem or stipe, the shape and position of the ring, the presence in some form or other of one or both of the veils referred to, or their entire absence afford important distinctions by which species may be determined. Standing at the head of the family Agaricaceae, the very aristocrat or the whole mushroom race, is the genus *amanita*, to which belong our most poisonous varieties. I shall reserve the discussion of these for the next article, and shall proceed to describe some edible species belonging to this family found within the college grounds, or in the neighborhood of Whithy.

cap when fully expanded is from two to three and a half inches in diameter and varies in color from creamy white to light brown or tawny. The gills are unequal in length and are pink when first revealed, afterwards changing to brown, purple brown, and almost black. The stem is solid and generally shorter than the horizontal diameter of the cup, and about equal in thickness throughout. The spores are brown and may be obtained by placing a mature specimen gills downward on a piece of white paper, care being taken to cover it with a tumbler or bowl to exclude draughts of air. We cannot shake the spores out of this mushroom, and have them appear in the form of dust, as in the case of the puff ball. If it is