

few as to give it barren aspect. Those of greatly differing characteristics should be somewhat separated. Planting for color effect in autumn foliage may also be done, and to secure this a careful study of the shades of leaf of each variety and species, with the time of their assuming different tints, is necessary. As a rule an individual tree takes on the same tint each fall, but this color would probably be made to vary by transplanting the tree to other soil. The autumn color of American foliage is among the brightest in the world, and its effects should be more sought in lawn planting.—From "Street and Shade Trees," a book issued by the Rural Publishing Co.

COMPOSITION OF THE APPLE.



HEMICALLY, the apple is composed of vegetable fibre, albumen, sugar, gum chlorophyll, malic acid, garlic acid, lime, and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. This phosphorus is admirably adapted for renewing the essential nervous matter, lethion, of the brain and spinal cord. It is, perhaps, for the same reason, rudely understood, that old Scandinavian traditions represent the apple as the food of the gods, who, when they felt themselves to be growing feeble and infirm, resorted to this fruit for renewing their powers of mind and body. Also, the acids of the apple are of signal use for men of sedentary habits, whose livers are sluggish in action; these acids serving to eliminate from the body noxious matters which, if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such an experience must have led to our custom of taking apple sauce with roast pork, rich goose, and other like dishes.

The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter engendered by eating too much meat. It is also a fact that such fresh fruits as the apple, the pear, and the plum, when taken ripe and without sugar, diminish acidity in the stomach rather than provoke it. Their vegetable salts and juices are converted into alkaline carbonates, which tend to counteract acidity. A good ripe raw apple is one of the easiest of vegetable substances for the stomach to deal with, the whole process of its digestion being completed in eighty-five minutes. Gerard found that the "pulpe of roasted apples mixed in a wine-quart of faire water, and laboured together until it comes to be as apples and ale—which we call lambswool—never faileth in certain diseases of the raines, which myself hath often proved, gaining both crownes and credit."—*Ex.*