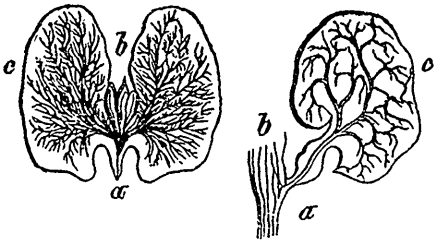


the seed, of which we know not a single instance, not even the eggs of the turnip fly, as lately asserted.

Too much water, however, will be certain to injure the seeds, by gorging them, and rendering them dropsical and liable to rot. But, on the other hand, many seeds will vegetate in water alone, provided the vessel in which they are placed be open at the top for the admission of air; so that a good supply of water is absolutely essential for furthering this process. It is important, however, to avoid both extreme drought and moisture, in the propagation of plants by seed, either of which is more or less injurious. Hence the propriety of sowing seeds when the weather is only moderately wet, and the ground not saturated with moisture, in order that the seeds may obtain a due supply, but not a redundancy of water.

The seed lobes, after having parted with some of their nutrient matter, for the production of the roots, protrude themselves from the soil, expand and are changed into seed leaves. They then perform functions of a totally different nature, and proceed to prepare pulp from the sap now taken up by the young root, for the support and development of the stem and leaves. When these latter have become sufficiently expanded to be capable of providing pulp for themselves, and the other parts of the plant, the seed leaves, having fulfilled the office assigned to them by nature, soon wither and decay.



Seed lobes in the bean, with the nutrient vessels branching through them magnified. *a*, *a*, root; *b*, *b*, gemlet; *c*, *c*, seed lobes.

The seed leaves are, therefore, of such vital importance to plants, at an early stage of their existence, that if they are destroyed at this period of their growth, either by insects, such as the turnip fly, snails, slugs, or grubs, or by birds, frost, or other casualties, they seldom recover, and the whole crop generally perishes. This is not unfrequently the case with young turnips, radishes, and cabbages; and the only alternative, where it is permitted to occur, is to dig the ground slightly over, and sow it afresh. The greatest care, however, should be exercised to prevent such an accident, as it will frequently throw the crop too late to be of any real use.

Propagation by seeds, then being the most natural and easy means of multiplying plants, should ordinarily be preferred. But some plants, as the foreign geraniums, and most double flowers, do not ripen seed; in others, as the rose, the seeds are generally two years in the ground before they

vegetate, and do not produce flowers for several years after; and in other cases, each seed will produce a plant essentially different from the parent species. This latter circumstance has been taken advantage of by gardeners and florists, and hence are produced the almost innumerable beautiful varieties of the dahlia, chrysanthemum, heart's-ease, tulip, ranunculus, and many others too numerous to mention. In culinary vegetables, also, most of our best sorts of cabbage, lettuce, and other similar kinds, have been produced from seed. These are only to be obtained, however, by what is termed "cross-fertilization," or hybridising, which is simply transferring the pollen, or small yellow or red dust, from the anthers of a flower of one sort, to the summit of the pistil or female part of the flower of another sort, and thus producing seed, the plants which will partake of the nature of both the parent species.

A continuation of such circumstances as those before mentioned, has led to the application of art in the propagation of plants, and several methods have successively been devised, for multiplying particular kinds, in a different manner than by sowing seed. Indeed, to such an extent have the various systems been carried, that propagation by seed has been almost entirely superseded, except with such kinds as are annual or biennial duration, or are of herbaceous habits. In the following arrangement, it will be seen that the different methods have been treated of in the order in which they were naturally suggested.

**ROSE INSECTS.**—If our lady readers are desirous of keeping their rose bushes free from the small green vermin that so frequently infect them, the following remedy will be found a most effectual one:—To 3 gallons of water add one peck of soot and one quart of unslacked lime. Stir it well—let it stand for 24 hours, and when the soot rises to the surface skim it off. Use a syringe for applying it.—*N. E. Furmer.*

**DIRECTIONS FOR BOILING RICE.**—Take one pint of good clean sound rice, wash it well in several waters, rub it well between the hands, and pour off the water at each washing as soon as possible, to take off all the small particles that would be likely to color the rice.—This done, take one quart of water to one pint of rice, put in one-half teaspoonful of fine salt, put it over the fire, let it boil fifteen minutes without stirring, and then take it off. If the rice has not taken up all the water, pour it off; if it is good rice it will take it all up. When this is done, give the rice one good stirring, and the only one, place the kettle on some hot embers where it will simmer for fifteen minutes longer, this is done your rice will come on the table, each grain separate, as white as snow and well cooked.—*New England Farmer.*

**CURD CHEESE-CAKE.**—One quart of milk, half a pound of sugar, a quarter of a pound of butter, five eggs, one teaspoonful of grated nutmeg, a quarter of a pound of currants

Warm the milk, and turn it to a curd, with a piece of rennet, or a tablespoonful of the whey in which a rennet has been soaked. As soon as the milk is a thick curd, take it out with a broad ladle or spoon, and lay it on a sieve to drain. Beat the eggs, and add the drained curd, also the sugar and butter, which must have been beaten to a cream, then the spice and fruit. For those who would prefer it sweeter, more sugar may be added. Line your pie plates with paste, fill them with the above mixture, and bake in a moderately hot oven.