

ject is, to have the leaves clear the ground. The prime leaves can be saved when of any size. When priming, leave a pair of leaves together, standing opposite on the stalk, and when topping, leave a pair at the top, standing the other way, that the stalk may be balanced, and have as many leaves on one side as the other.

**WHEN TO DO THE TOPPING.**—As the topping of the tobacco plant is all essential in order to promote the growth and to equalize the ripening of the leaves, I would observe, that this operation should, at all events, commence the instant that the bud of the plants shows a disposition to run up to seed. It is topped two to three feet high, and performed by nipping off the bud by the aid of the finger and thumb nail; washing the hands after this is sometimes necessary, as the acid juices of the plants otherwise would soon produce a soreness of the fingers.

In topping, leave from eight to sixteen leaves, according to circumstances and condition of the plants and lateness of the season. The less leaves you leave the larger they will grow and the sooner ripen. I consider from ten to fourteen leaves the most proper number to leave on; though some planters prime to six inches and top to eight leaves. When your plants are small and the season far advanced, prime less, and when your tobacco is large and on extra rich ground, top higher, remembering always to leave on about what you think will have time to ripen.

**SUCKERING.**—After the plants have been topped, the buds in the axils of the leaves push forth with great vigor, and must be pinched or broken out as fast as they appear, so that all the strength of the sap will go into the leaves.

**WORMING.**—The tobacco worm, which feeds upon the leaves, comes from the egg deposited on the under edge of the leaf by the hawk-moth, sphinges or hornblower. That begins to fly the first of June or perhaps sooner. This moth is large, and has somewhat the flight of a small bird, quick in its motions, but not very shy. It is of the ash-grey color, having two sets of wings. The spread of its wings is from three to five inches. It flies about at dusk seeking its food, which is honey, from various flowers open at night. It visits potato blossoms, and is particularly fond of the blossoms of the Jamestown weed. The more of these moths that are killed, the less will be the worms. The moth can be knocked down by watching near the flowers

mentioned. The fields should be examined every other day, or at least twice a week, to gather the worms. It is easy to be seen where the worms are making fresh cuts, and they will be found on the under side of the leaves. If turkeys visit the field early in the morning, they will destroy a great many worms. The tobacco worm grows very large and looks very ugly. They are generally killed by pinching them between the fingers. It would be less disgusting for each one to carry a bag or pocket fastened to the side, and bag them for chicken meat. The most suitable persons to do the worming are children from ten to fourteen years old. They can be encouraged by giving premiums to those that gather the most worms. There is also a small worm which attacks the bud of the plant, and which is sure destruction to its further growth; and some again, though less destructive, are seen within the two coats of the leaf, feeding, as it were, on its juices alone.—*Tobacco Growers' Guide.*

#### THE PEA.



HERE are but few vegetables, probably, more universally admired than the pea. Of all leguminous plants, it is the most nutritive. The following table exhibits the results of analysis by distinguished chemists:—

100 lbs.	wheat contain	85 lbs.	nutritive matter.
"	rice	90	"
"	barley	80	"
"	beans	89 to 90 lbs	"
"	peas	93 lbs.	"
"	meat, average	85	"
"	potatoes contain	25	"
"	beets	14	"
"	carrots	14	"
"	turnips	8	"
"	bread	80	"

It should be recollected, however, that *weight*, not *BULK*, is here made the standard of comparison. Peas, pound for pound, it will be seen by the above table—and this we have no reason to regard otherwise than strictly correct—contain two and a half times as much nutriment as meat. Were the comparison to be graduated, on the contrary, by the criterion of *bulk*, or volume, the advantage would be greatly in favor of the latter. Between a barrel of peas and a barrel of pork, for instance, there could be no comparison, unless, indeed, we should admit into it the relative estimate of cost of cultivation and of production.

The principles on which the elementary properties of vegetables depend are, gum or mucilage starch, gluten, jelly, fixed oils, sugar and acids. The alimentary proper-