

harvesting, which is done leaf by leaf, starting with the ripe bottom leaves. The tobacco should be fairly well ripened. The leaves are harvested one by one, from bottom to top, as they ripen. Thus the field has to be gone over four, five or six times, and it is hardly possible to complete harvesting before the end of September. It is this operation which requires the most labour and which restricts the growing of Turkish tobacco to those growers only who have large families. Owing to the closeness of the plantation, children are able to do better work. It is thought that a child of ten years, well trained in this kind of work, may harvest from 25 to 30 pounds a day.

The harvested leaves are strung on laths, and the laths, which are 4 to 5 feet long, are hung horizontally in special curing houses. A curing house for Turkish tobacco consists of a light wooden frame, 5 to 6 feet high, covered with glass. Hot bed sashes make very good covers. The curing house may be set up against a wall with a sunny exposure, which forms the best possible situation. The wall is used as the back of the curing house. The opposite side is glazed like the top, at least on three-fourths of its length. Bed sashes can also be used for this purpose. They should be set with a light slant, as well as those of the roof, to facilitate the removal of the water in case of rain. The two ends of the curing house may be covered with cotton sheets which are quite satisfactory. The great difficulty in curing is in obtaining the pale colour which is preferred in Turkish tobacco. Care has to be given to regulate the entrance of air, of light and the degree of heat. This is a delicate operation which requires a great deal of care, as there is great danger of sweating during the hanging of the products. The curing takes place slowly; it requires from 40 to 50 days.

The first curing is completed by a second one, in a garret, where the laths are hung vertically, fairly close to each other. This is what is called '*mise en touffes*' or 'bunching.' Then the leaves are graded in low leaves, middle leaves and top leaves; in each of these three groups the leaves are divided in dark and light-coloured leaves, or six classes in all. The tobacco is now ready for fermenting.

NOTES ON CHEMICAL FERTILIZERS.

In Bulletin No. A-6 of the series of the Tobacco Division, the importance of experiments with chemical fertilizers is dwelt upon, and the proper method of experimenting is explained. The chief purpose of the bulletin is to encourage the growers to ascertain for themselves the fertility of their land by a well planned test of single fertilizers and to warn them against the irrational use of fertilizers put on the market under the name of 'complete fertilizers.' Experiments were carried on our stations, using the method recommended to the growers, and the results obtained as well as the observations made during the last three years have been compiled and are here presented.

The fertility of the soil was determined by a physico-chemical analysis, and by actual growing experiments, the latter in order to check the data of the analysis. This work required two years, after which a special fertilizer was ordered, the composition of which was based upon the results obtained. An arpent of land was divided into three equal plots on which the following mixtures were applied in 1911: