

often as necessary to keep the surface of the soil well loosened, clean, and to provide the plant with the amount of moisture required.

When a light soil has been given frequent cultivation (alternated plowings and rollings, hoeings), previous to plantation, the first hoeing will generally be given only about 15 days after sowing and the second, a few days prior to flowering-time.

In compact grounds, intermediate hoeings should be made after each rainfall, as soon as the soil will have sufficiently dried up, so as to prevent the forming of a crust at the surface.

If hoeings are necessary to hasten the growth, it is not any less important that they be superficial and not made when the foliage of bean plants is wet. Should the teeth of the hoe penetrate deep enough to reach the running roots, there would certainly result a diminution of the yield and quality of beans, because they are the very ones nourishing the fruits. We shall consequently, not come too close to the plants with the machine, when weeding. The work must be made by hand between each of the plants. Moreover, it would be favoring the development of rust on the plants than to weed or hoe them when wet.

It is particularly important to hoe frequently when the flowering-time is over, so as to destroy weeds, to prevent evaporation and to make the soil retain a sufficient amount of water to insure the plant with the food required to reach its full development: essential condition to have a good crop.

Hoeings and weedings are generally made with hand cultivators (Fig. 4), horse cultivators (Fig. 5), or with two-horse cultivators (Fig. 6), according to the importance or area of the crop.

Hilling.—As regards the profits to be derived by the plant, hilling up is not worth any more than hoeing. We would advise that it be done in the two following cases only: 1o to earth up the plants that might have been laid bare by the rain, in a light soil; 2o to facilitate the mechanical harvesting of the crop in a flinty soil. But we will never say too much to be careful about the roots.

Harvesting

Harvesting the crop.—One will recognize that beans have come to maturity, as soon as the leaves and pods are turning yellow, begin to dry and the seeds are hard enough to be difficultly penetrated with the finger nail. We will then hand pick the soundest and finest pods, store them carefully in a dry place, unshelled, because the first to ripen are those that afford the best seeds. The owners of genuine varieties would be well advised in always harvesting their seeds in this way; this is the safest means of obtaining first choice seeds.