prevent any leaf growth whatever, until the latter part of June, then plough 5 to 6 inches deep and keep black the remainder of the year by constant surface cultivation.

The following suggestions from the Ontario Weed Bulletin are worth a great deal:

- 1. Bear in mind that a few patches of perennial sow thistle if allowed to mature may seed down a whole farm.
  - 2. Watch for the first few patches.
- 3. Sheep are fond of this weed and if turned on a field after harvest will prevent its seeding and by close cropping weaken the underground root-stocks.

## SPRING AND FALL CULTIVATION.

The chief characteristic of annuals is the amount of seed they produce, and about the only way to destroy these seeds is to get them to germinate and then destroy the young plant. Seeds of some plants if given no opportunity to grow will remain in the soil 10 to 15 years without losing their vitality. As noted elsewhere, before seeds will grow they must have proper amounts of air and moisture and it was pointed out also that these proper conditions are obtained only by having the soil in good tilth.

In dealing with annuals and winter annuals the question of spring and fall cultivation is highly important. Many farmers today arrange to follow the binder with the disc harrow and find this a paying method. Moisture is then conserved during the fall while the stooks are on the ground, and besides it happens too often that the stooks are not removed before the ground is frozen and hence the advantage of following the binder with the disc.

At mention of work of this kind we too often quote the common excuse, "no time." We used the same excuse about pulling the first few mustard plants that appeared in our fields. Our present system of all wheat growing makes it difficult to do more than very ordinary cultivation, but when weeds get in we must find the time for the extra work, change our system or get out.

With reference to winter annuals it might be stated that they obtain their greatest foothold on account of the practice of stubbling in grain, hence late fall or early spring cultivation is essential to their eradication. The same is true of biennials.

Are weeds bad or is your system of farming at fault?

An unpardonable sin-to sow dirty seed on clean land.

Weeds are neither things of beauty nor joys for ever.

Even if you are a bit grouchy about farm work don't sow dirty seed on clean land.