

LESSER BURDOCK, BUT, CLOT BUT, OR BEGGAR'S BUTTON (*Arctium minus*, Bernh.)

A biennial weed with tremendous roots, probably the largest of all weed roots. This root is uniform in size for a foot below the surface; further down it is branched, and has a great hold on the ground. The stem is much branched (from 4 to 6 feet high) and rough, with broad rounded leaves, the lower surface lighter green than the upper. The flower heads occur in clusters and are pale in color. The flower receptacle, or involucre, as it is called, is composed of hard spines, which are very adhesive, and do much injury to the wool of sheep. Seeds are brown, $\frac{3}{8}$ in. long and spotted with darker brown (Fig. 49).

Time of flowering, July-September.

Time of seeding, August-October.

Dispersal—Chiefly by animals carrying the seed from place to place.

The plant when burned yields a good quality of alkaline ash, equal to the potash; and a decoction from the roots is said to be equal to the juice of Sarsaparilla as a blood purifier, etc.

Remedy. Cut below the crown with a spud and burn the tops.

CANADA THISTLE, OR CREEPING THISTLE (*Cirsium arvense*, (L.), Scop.)

This weed was originally introduced from Europe, and hence incorrectly called Canada Thistle. It is a hardy perennial, with numerous underground stems which bear a large number of shoots. (See Fig. 50, illustrating two of these shoots.) It grows to a height of 1 to 3 feet. The leaves are narrow and long, deeply indented into very prickly, lobed segments. The leaf has a crimped appearance, and at the base slightly clasps the stem. The under surface of the leaf is woolly, the upper surface less so. It produces numerous heads containing flowers, which are 1 to 2 inches across and of a lilac-purple color. The flower is smaller than that of other thistles. The seed is grey, oblong, and about $\frac{1}{8}$ in. long, with slight longitudinal markings. Attached to the top is a conspicuous tuft of long hairs (the pappus) (Fig. 50). The seed is carried long distances by the wind. An average plant produces 3,500 seeds.

Time of flowering, June-August.

Time of seeding, July-September. Many plants produce no seed.

Dispersal—Chiefly by the wind.

Great care should be taken to prevent Canada Thistle from seeding.

Eradication. The Canada Thistle can be eradicated in several ways, if thorough work is done at the right time.

1st. By careful and persistent spudding, done in such a way as to prevent the plant from developing top above the ground.

2nd. By early after-harvest cultivation of stubble ground.

3rd. By the frequent introduction of hoed crops into the rotation.

4th. By the seeding much with clover, taking one or two crops of hay from the clover sod shallow early after harvest, and cultivating frequently throughout the fall.

5th. By summer-fallowing.

Assuming that all land should be plowed in the fall, we may outline briefly one or two methods of destroying thistles:

(1) *In stubble ground for spring crop.* Gang-plow shallow and harrow after harvest (immediately after the crop is off); and as soon as seeds have hatched