

WEEDS AND WEED SEEDS.

Illustrated and Described.

The greatest difficulty in the way of producing a more abundant supply of clean clover and grass seed, as well as seed grain, is the prevalence of weeds. In order to produce high class clean seed, farmers must be constantly on the alert to keep the weeds on their farms in check and prevent the introduction and spread of new varieties. In various ways weeds lower the yield, depreciate the quality and value of crops, and add to the cost of production. They rob the soil of plant food and of moisture, thus increasing the effects of drought by taking up water from the soil and wasting it by evaporation; they crowd out more useful plants, being hardier, and, as a rule, more prolific; they increase the cost of every farm operation and cause depreciation in the market value of crops because of the presence of weeds in hay or of weed seeds in grain; the eradication of the worst weeds is costly in labour, time and machinery, and frequently prevents a farmer from following the best crop rotation or from growing the most advantageous crops; many weeds are conspicuous and all are unsightly on farms, and thus depreciate the value of land; some weeds are harmful to stock, while others are injurious to their products; weeds attract injurious insects and harbour fungus diseases.

New weeds are introduced on farms with grass, clover or other commercial seeds, and commercial feeding stuffs which often contain vital weed seeds. They are spread from district to district through various transportation facilities, such as railways, and become disseminated within a locality in stable manure from towns and cities, and through threshing machines and farm implements. The wind carries some weed seeds long distances, not only in summer but with drifting soil and over the surface of the snow in winter. Streams distribute them along their courses. They are also distributed by herbivorous animals, through the stomachs of which the seeds pass undigested; or they attach themselves by special contrivances, such as hooked and barbed hairs, spines, gummy excretions, &c., to passing animals.

Classification and Eradication.

Weeds are classified according to the length of time they live, as annuals or one year plants; biennials, or two-year plants; and perennials, or many-year plants. In eradicating weeds it is of the greatest importance to ascertain under which of these heads they come.

ANNUALS.

Annuals complete their growth in a year. As a rule, they have small fibrous roots and produce a large quantity of seed. Some weeds, called winter annuals, are true annuals when the seeds germinate in the spring, but they are also biennial in habit; that is, their seeds ripen in the summer, fall to the ground, germinate and produce a certain growth before winter sets in, and then complete their development next spring. Annuals may be eradicated from land, however badly infested it may be, through any method by which germination is hastened and the young plants destroyed before they produce seed.