

improved but their crops would receive a proportionate increase. It is physically impossible for any field to bear two crops—one of weeds and the other of grain—at the same time; the former will be certain to obtain the mastery of the latter. The angles formed by our zig zag fences are, by neglecting to mow them in sufficient time, prolific sources of weeds, as though they were specially designed and set apart for the purpose. All such places should be carefully and periodically examined and kept clean; and the landsides and borders of woodlands ought not to escape a similar method of supervision, and no weed should any where be allowed to ripen its seed. By steadily following out such a course the annoyances and losses of the farmer would diminish as his crops and profits increase.

Few are aware how strangely prolific are these pests. Professor Buckman, by the most careful experiments, ascertained that a single plant of the common groundsel will produce 6,500 seeds in one summer. The graceful corn-cockle sheds 2,600 productive seeds; and the red poppy, which diversifies the corn fields of the chalk and limestones of England, produces 50,000 minute but vital seeds. The sow-thistle branches out into the wind its 20,000 flossy parachutes, bearing the germinating car-like speck, to undulate with every breath of air and take root far away. The common dock lets fall its 13,000 solid grains, each destined to shoot down an exhaustive top-root into the soil. Dandelion produces nearly 3,000 seeds, each furnished with an inimitable apparatus for a distant flight. The cow parsnip, if neglected, will produce 5,000 plants; the meadow scabious, 4,000; the May-weed, 45,000; the daisy 13,500. Nor is it sufficient to cut down their bearing plants, and leave them to dry on the dung heap or wither on the ground. The sap in the stem and leaves of the cut-down plants still mounts up to and nourishes the seed. Nor is their wondrous vitality less remarkable. If the ground be trenched three or four feet deep, there will appear upon the surface a dense crop of weeds, of a different kind from any observed before. They may have been hidden for ages, but when exposed to the air and rain and sun, the little speck of vitality within germinates, as if the seed had freshly fallen! No limits can be assigned to

the vital durability of some kinds of seeds, when buried deeply in the ground, and not stimulated by the action of heat, moisture, and atmospheric air.

It is intolerable that an indolent farmer should be permitted to poison his neighbor's fields. If he is lost to all sense of the injury he inflicts upon his own produce, he should be coerced to extirpate these enemies for the sake of others, whose property and labour are deteriorated by his carelessness. Alexander II. of Scotland denounced that man to be a traitor "who poisons the King's lands with weeds, and introduces thereby a host of enemies." And it is said that whoever was found to have three heads of the common starwort among his corn, was fined a sheep for each stalk. In Denmark the farmers are bound by law to destroy the corn-marigold; and in France a farmer may sue his neighbor who neglects to eradicate the thistles upon his land at the proper season. In Australia a similar regulation has been imposed by legislative authority, with, it is said, the most beneficial results. In Canada, we believe, enactments have been issued against allowing thistles to ripen on the road-sides and exposed public situations, both from the legislature and township corporations; and it is passing strange that such important and beneficial regulations on the proper observance of which both private and public wealth is so closely dependent should in many districts become practically operative. It is high time that some firm step should be taken, not only against thistles, but pigeon weed, and the whole tribe of farm pests of this nature, forming as they do insuperable barriers to Agricultural progress, and consequently to the increase of wealth and national prosperity.

SKETCHES OF THE DIFFERENT BREEDS OF CATTLE.

Durhams or Shorthorns.

(Concluded from page 20.)

Besides the very eminent breeders referred to in a former paper, others of scarcely less name appeared in the field, and to the result of their labors the general elevation of the present breed of Short-horns is owing; nor have they degenerated in the hands of their successors. The