

tion, the practice can scarcely be attended with other than the worst results.

A very erroneous opinion appears to prevail in relation to the degree of heat engendered by manure while undergoing the process of fermentation; the common presumption being that it is sufficiently intense to ensure the destruction of any seed which may be exposed to the influence of the fermenting mass. This supposition, however, will, upon careful examination, appear wholly unsustained by results. The fermentation which putrescent manure undergoes—unless under very peculiar circumstances—is rarely, if ever, found to rise sufficiently high to secure this object. The seeds of the common red sorrel—one of the most pestiferous of all weeds in cultivated land, as well as those of the mullein, white weed, and numerous other plants which so annoy us, appear to be in no way injured by the utmost degree of heat that can be produced, without an actual combustion of the heap.

On the contrary many seeds appear to derive an actual advantage from it,—the heat to which they are subjected, inducing a more speedy germination and development, so that by the time the soil is fit for their reception, of the manure in which they are contained, they are just in the proper condition to take root and vegetate, before those upon which the husbandman bases his expectations of a crop, have had time to swell. Owing to this premature development, the fields are often stocked with a spurious vegetation, and that which was supposed to be true economy, results in a ruinous waste; the small quantity of manure accruing from the decomposition of the haulm, being purchased at an enormous outlay of labor; and what is still worse, the soil instead of being purged of its noxious weeds is fouler and more prodigally infested than before. Those persons, therefore, who contemplate cleanliness of cultivation, should destroy the weeds that infest the fields before they mature their seeds. This may require care and labor but is not impracticable. But should any escape the hoe, the scythe, or the hand let them be carefully gathered together in some convenient place and burnt.

The thistle, in some districts is the most troublesome weed with which the American farmer is called to contend. Yet we often see it growing in farm yards, gardens by the road side, and even in corners of cultivated fields, in patches sufficiently extensive to ensure the production of seed enough to "stock" an entire township!

This is bad policy. Although the thistle is a "hard customer" and a most impoverishing tenant, it is yet a harder master. When once permitted to usurp the soil, its eradication is attended with much trouble, and its toleration with ruin to the richest soil. It is common now to consider all productions as weeds, which is not purposely planted or sowed. The wheat that vegetates in the corn field, and the corn plant that springs up accidentally among the cultivated plants of the garden, is as much a weed in the strict acceptation of the term, as the burdock which rears itself in the pasture, or the thistle which fouls the mowing field.

As most species of spurious vegetation are of an indigenous character, they possess, naturally, a hard-

ness and vigour of constitution which enables them to subsist and flourish on soils which are poor and thin, and to survive injuries, which no valuable or cultivated plant, not indigenous in the soil, can do. This tenacity of life will suggest the necessity of extra hoeing, and greater care in their eradication than is usually bestowed.

#### PROPORTION OF BUTTER TO MILK.

The agitation of this subject in Britain, in consequence of certain statements made by Mr. Horsfall to the officers of the R. A. Society, if it has not been the means of producing more butter, it has brought out many statistical facts from various parts of the kingdom. From several communications published in the *Agricultural Gazette*, we make the following synopsis, will be interesting to American dairymen and dairywomen. It should be borne in mind that the wine quart is probably used in every case.

An Irish correspondent gives the result of experiments on a large scale, extending through the year showing the produce of cows for each month, the kind of food used, the quantity of milk given, the quantity of cream taken off, the quantity of butter obtained, the average quantity of new milk and cream required for a pound of butter. From the table given, it appears that in the summer half of the year, it takes 11 qts. and for the winter half 9 qts. 1½ pnts; and for the whole year 10 qts. 1 pint of milk for a pound of butter, and 2½ pints of cream to make a pound of butter. The cows averaged for the year 217 lbs. of butter each. The writer says—

"The stock from which the above experiments were taken, were chiefly known as the well-bred Irish cow, and the produce of that animal, if well selected, is I think as good as any. No doubt crosses of the Dutch and Durham produce also good dairy cows; but as far as I have seen, the Durham is much better adapted for the butcher than the dairy. The Ayrshire is also good for the dairy, with a tendency to fatten, and is perhaps better adapted to light soils than any of the other breeds. About twenty miles from this (Cork) I knew a large dairy of Devons; they were a very pretty stock, and gave milk of a rich quality but smaller in quantity than the others. To ascertain the comparative merits of the different breeds on the same pasture and with the same treatment would be very desirable."

A Dorchester correspondent writes that the average produce of butter per cow in a year, is "about 13 dozen," or 156 lbs., but that he could mention dairies that have produced "19 dozen or 228 lbs., per cow. One quart of cream makes a pound of butter. It is said much "skim-milk" cheese is made. Many of the best dairies are kept on poor land, but if the cows are not kept on too thick, their yield is great and of the best quality.

An extract from a communication of Mr. Littledale, of Liscard Hall, reads as follows:

"I had churned on Saturday from a lot of cows, about three months calved, and all of the large York-