the previous year, and also to spread (as from a centre) to the neighbouring crops from a charlock infested field. It is often supported in the spring by these or other weeds till the turnips are large enough for it to attack, and therefore means should be taken to get rid of them beforehand from the autumn stubbles In the case of charlock, a double turn of the harrow over the stubble is of use, small weeds may be cleaned by broad-sharing; the seeds are thus covered sufficiently to induce immediate germination, and the sprouting weeds, as well as roots in the soil, will be cleaned by the regular processes of cultivation further on. Waste spots of land and hedge-sides should also be attended to; the first is often overrun with Shepherd's purse; the second is often infested with the tall large-leaved, onion-like smelling plant with white flowers, the shape of the charlock blossom, known as 'Jack-by-the-hedge.

"A deep cultivation that will turn down weeds and destroy insects is very serviceable, and care should be taken that all manure from the yards or sheds should be completely buried. Any long strawy lumps left on the surface will shelter the fly, and from these it will come out to the destruction of the crop.

"The three requisites for healthy germination are warmth, moisture, and some amount of air; and it is only by securing these that a rapid and healthy development of the plant can be obtained. It has therefore been recommended, when the surface is prepared for drilling, to leave it undisturbed for three weeks; also, on the other hand, when partly rotted farm manure is ploughed in in spring, to sow immediately. In each case the reason is the same—that is, to secure the moisture in the ground—in one instance by not opening the pulverised earth more than can be helped, and in the other by putting the seed above the half-rotted dung before the moisture and warmth accompanying decomposition has gone from it.

"Thick sowing is advised by various growers, who state that thus, in case of hot dry weather, the plants will thrive better for the protection they give to each other (being thus moderately damp, with the roots shaded), and that some may be reckoned on to escape the fly. This, however, needs careful looking to, or the result will only be a worthless drawn growth.

"With regard to swedes, it has been found, from the preference of the fly for the white turnip, that if the seed is mixed in the proportion of one-quarter white to three-quarters swede, or again, if one drill of white is put in at intervals amongst the swedes, that the fly will be attracted to the white and thus allow the swedes to get well ahead. This plan was found to answer well by several years' experience in East Lothian and elsewhere.

"The turnip fly is active in bright dry weather; and when the thermometer stands at 75° in the shade it has been observed on the wing in great numbers; when the weather, on the contrary, is cold and wet, it is sluggish; and in rain or heavy dew these beetless cannot leap, from the moisture clogging their legs, and thus preventing the powerful springs with which they customarily leap out of the way of attack.

"This circumstance has much to do with the very different success, in different circumstances, of exactly the same remedy. A dressing that is put on early in the morning, whilst the dew is still heavy on the plant, has a very different effect to what it has either on a morning that is dewless or in the middle of the day, when the fly has every chance to protect itself under clods of earth, etc., before the dressing reaches it, and, though the reason is not given, the advice is constantly the same in observations on remedies—apply whilst the dew is on.

CARE OF CALVES.

The Jersey calves will be keep in box-stalls all the summer. It is less trouble to feed them there than in the fields. They will not be exposed to the changes of the weather, or to the flies, as they would be out-of-doors. They are less liable to sickness, and will grow just as fast, and faster, with a feed of skim milk, oat meal and oil meal, three and one mixed, and plenty of hay. They should be well bedded, and the stables be frequently cleaned. Calves kept in this way will have shining coats and be tame, quite the reverse of their condition if running wild in a field. The meal should be fed sparingly at first, beginning with a pinch and gradually increasing up to a quart a day by the time they are two months old. As they begin to take more meal, they will require less milk, as they will at the same time eat more hay. Clover hay cut when green is the best. When they can get this kind of hay they will do with less milk. One Ayrshire cow feeds three calves until they are six weeks old, and then they get the same amount of milk with twelve hours' cream taken off. When ten or twelve weeks old they get four quarts daily of sour milk. Calves raised for cows should not be made fat, but be kept in a thrifty, growing condition. There should be an equilibrium of fat, muscle, bone, etc., and not an excess of fat, which will spoil any calf.

Rural New-Yorker.

Different Breeds for the Dairy.

The Toronto Globe gives the following as the conclusions from experiments at the ontario Model farm, as deduced from Prof. BROWN'S last report:

An average cow for dairy purposes should give 20 pounds of milk per day during 200 days every year; 8 pounds of cream for every 100 pounds of milk; 45 pounds of butter from every 100 pounds of cream, and fully 10 pounds of cheese for every 100 pounds of milk. Bulk, volume, or percentage of cream, is no safe criterion of the quantity of butter in that cream; weight alone is the proper mode of judging. Breed, as much if not more than food, affects the quantity and quality of milk, cream, butter and cheese. In Ontario Experimental Farm experience, the Short-Horn is an average milker, short in duration per season, low in specific gravity, high in per cent. of cream, proportionately high in butter, and also high in cheese production. The grade of this breed approaches the nearest of any others to what is called a "general purpose cow." The Aberdeen Poll is low in quantity of milk, and the second highest of any in specific gravity. The grade of this breed is much improved in milking properties, giving a greater weight of cream, though a lower per-centage of it. The Hereford is not more prominent than the Short Horn and Aberdeen Poll in regard to milk, except in proportion of butter from cream, in which it is highest. The grade is very prominently in advance, particularly in proportion of cream, but one of the lowest in cheese. The Devon is most distinct in highest specific gravity of milk, and the weight of cheese from milk. We have no experience with the grade of this breed.

The Galloway milk appears to be of a peculiar texture—rich, or so very small in butter globules as to rise very slowly and very indistinct in the test tube.

The Ayrshire is a particularly heavy, long milker, giving five times her own weight per season. The milk is somewhat low in specific gravity and per cent. of cream, but is over the average in cheese production. The Ayrshire grade is not improved in any respect except in duration of milking season.

The Jersey is remarkable for proportion of cream, averaging 35 per cent., and giving a value of dairy products in-