

flag drawn by the staff crossways over the surface, and is kept moist with paraffin and water. It is light work for a horse, and the cost is not appreciable. The effect is, however, immediate, and deserves to be tested and reported upon, so that the plan may be generally adopted or abandoned, according to results obtained.

CHARLOCK SPRAYING.

The use of paraffin for turnip fly has some resemblance to spraying charlock, which seems this season to be again in the ascendant. The trials made by the Yorkshire College are declared to be eminently successful, and experience teaches that the charlock is most successfully treated when very young. Charlock spraying is not quite so easy to put in practice as might at first appear. The difficulty of providing water on the dry uplands where the weed is most rife; the objection to taking horses from the pressing work of root cultivation at the busiest time; the cost of purchasing sprayers, and the uncertainty which still hangs over the process, are all deterrents. Besides, when charlock is in the early stages of growth it is a question not to be too rashly dismissed whether it may not be equally well destroyed by harrowing. When young corn is seen to be invaded by the small cotyledon leaves of the charlock a fine-toothed harrow will draw them by the million, and expose their white filaments to the sun and air

Charlock is often very erratic in its germination. In some cases it refuses to show itself, although land may be ploughed and harrowed and left for a period which ought to suffice. After the Farmer's patience is exhausted, and the land has been drilled, then the weed will appear in countless numbers, and threaten to smother the crop. In a case now before me, part of a field was early ploughed and harrowed, and the charlock still refused to come. After drilling with turnips I see it is covered with seedlings of charlock. The other half of this field was ploughed and drilled without waiting a day, and there the turnips are in row, and no charlock is yet to be seen. It is difficult to know what to recommend in such cases—whether quick drilling, or waiting for the appearance of the charlock.

HAY MAKING.

Cutting has commenced, and it is possible that ricks have been made. The cut of clover hay is sure to be light, as the season has not been favour-

able. There is no advantage in postponing cutting, as young hay is always best. Early cutting ensures a better aftermath either for a second crop or grazing. The right moment for cutting is when both grass and clovers are in full bloom. The most rapid growth takes place during flowering, but after the bloom is out every day tells against the quality of the hay. The nutritive juices begin to gravitate towards the seed, which is not desirable in hay; the soluble cellulose begins to change into woody fibre, and the leaves lose their succulence. Good hay is made from young herbage, and is better made quickly, without too long exposure to either rain or sun. Clover hay should be as little moved as is consistent with keeping, as frequent turning only causes the leaf to drop. Light crops only require once turning, and may be then raked together and carted as soon as the hay is judged fit to keep in rick. A certain amount of heating and sweating in the rick is desirable, and does not produce mouldiness. It is rain water that makes hay mouldy. Cocking is practised in the North, but South-country farmers prefer to cart straight from the swaths, only throwing them together into heaps convenient for the pitchers. Meadow hay is different, and requires much more working, and is better cured in cock. We have at present to do with clover hay, and the above advice is sound regarding it.

The best plan is to cut it with a machine; to allow it to lie untouched for three or four days (1); to turn the swath and allow it to remain two days longer, and to cart it to the rick. The cost ought not to exceed 10s. per acre even in the case of heavy crops. It may be liberally computed as follows:

	s. d.	
Cutting with machine.....	2 6	per acre.
Once turning.....	1 0	"
Gathering the swaths and placing them for pitchers.....	1 0	"
Carting and rick building.....	4 3	"
Pulling, topping, and thatching...	1 0	"
	9 9	

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CO-OPERATIVE CREDIT.

Co-operation has done wonders for Ireland. Co-operative dairies were first started and since then co-operation has been introduced in nearly

(1) Here, two days will be found long enough; if very hot, 36 hours might do. *Ed.*