the employment of gangs of children that, under the supervision of a "Ganger," or contractor, used to be seen, literally, *running* about the fields in Essex, Cambridgeshire, etc., plucking up every visible plant of *cadluck* by the roots, since, we say, this practice has become absolute, the farmers there are at their wits' end to know how to combat it.

Most earnestly are the different Colleges of Agriculture striving to discover some dressing that, while not injuring the young grain-plants, will destroy the mustard, and partial success seems to have crowned their efforts. Thespraying with a solution of sulphate of copper is decidedly the best remedy as yet discovered, if the spraying is done when the mustard is in its early stage. The first solutions tried were evidently too weak. To be successful, the entire charlock-plant must be destroyed, and this, when the plant is strong and in flower, requires a strong dose. That sulphate of copper kills charlock without injuring the grain is true enough, but too many plants escape, even after double spraying, so it is clear that further experiments are needed. Cannot, in the mean while, something be done by a judicious process of cultivation in the early spring? Something in this form :

Suppose we have a piece of land, fall-ploughed, in preparation for barley, a crop that does not so peremptarily demand early sowing as do wheat, oats, or pease; why not pass the heavy harrows over it as soon as the land is dry enough? The seed of the charlock, recently brought under the influence of the air would soon sprout, and the subsequent cultivation in sowing and covering the barley would destroy the young plants. This was our constant practice in the old country and must have been effective, as we were but little troubled with charlock in our barley. Why is fall-wheat seldom infested with the weed? Probably, because the young plants are killed by the frost, and there are no more seeds brought up from below to supply their place. There is no doubt about certain soils being choke-full of charlock-seed, a fresh supply of which is brought within the influence of the air by every ploughing.

Principal Wrightson, of the Salisbury Agricultural College, says, in reference to his promise of giving any information in his power concerning the success of the experiments on spraying :

"Of the trial with the Strawson sprayer made in my neighbourhood, it is impossible to speak positively. The spray killed a good deal of charlock, but the effect for some reason was not complete, and the too numerous survivors are going to seed. The oats on which the experiment was conducted are not injured. The interruption to work at a busy season is also a drawback to spraying because it involves water carts and horses. This would not be grudged if the destruction of the charlock was complete. On the other hand, the experiments at the Uckfield College were very favourable. The conditions of farming are so various, that results, even in a case of this kind, cannot be trusted in their application in other districts. It is not what we read, but what we know to be practically certain in our own circumscribed little area that affects us farmers."

Since we wrote the above, we have received further information on the subject of the destruction of charlock by spraying with solutions of sulphate of copper or of iron. No end of experiments seem to have been tried in England this spring with it, and, on the whole, not unsuccessfully. At all events, the following results are to be depended upon :

1. That the efficacy of the treatment with copper sulphate depends upon the dryness of the season.
2. No solution capable of injuring the charlock has proved uninjurious to the barley.
3. No solution, though used at the rate of 40 to 80 gallons an acre has effectively destroyed the charlock.

When, at the South-Eastern College, Wye, Kent, spraying was tried for the first time, the weather was dull, and a shower followed within 30 hours; result: the barley was injured, the charlock not hurt.

Later, a perfect distribution of a solution of copper, iron, arsenic, sulphuric acid, sul*phate* of ammonia, and crude gas-liquor (containing the very pungent car*bonate* of ammonia), at the rate of 40 gallons an acre, with which every individual plant of charlock was wetted, did not kill one plant outright.

A third trial—weather hot and dry—; marked injury to the grain by all liquids that injured the charlock, but in no case was more than 10% of the latter actually killed past recovery.

The upshot is, that if the plots experimented upon are examined soon after the spraying, the effects seem to be enormous; but the plant is so full of vitality that, after having lost all its leaves,