

to dig up to at least 18 in. if required. A very compact tipping-lorry and traction engine combined is exhibited by Messrs. Mann and Charlesworth.

One of the most notable novelties is the fruit tree sprayer brought out by Messrs. Weeks and Son. This is a horse-power machine, holding 75 gallons, and fitted with 3 in. gun-metal pumps and gun-metal valve boxes, large air vessel, adjustable shafts, side throwing-out gear, copper strainers, and four lengths of armoured hose, terminating with five-nozzle sprayers. Four men walk behind the machine directing the spray, and when it is necessary to stop the horse to spray large trees, the action of the pumps, we are informed continues for about five minutes.

*The Maryland System of Fumigation.*—The method of fumigation for the destruction of the San Jose scale in Maryland, as carried out under the direction of the State entomologist, is worth notice, because it may be applicable to various insect and fungoid diseases of hothouse plants. The nursery plants or trees to be treated were placed in a large room tightly closed. Into this chamber a jar containing water was introduced, and some sulphuric acid was first dropped into the water, after which some cyanide of potassium was added, and the operator hastily withdrew, as the white fumes of hydrocyanic gas began to arise, these being fatal to the life of any man who inhales them for a few minutes. It is important to be precise in the quantities of the ingredients of the mixture, as too much of the cyanide might injure the trees or plants; and these should not be left in the fumes for more than half an hour without the house being ventilated. The proportions found by experiment to be satisfactory are one-fourth of a gramme of the cyanide for each cubic foot of air space in the fumigating room, with 50 per cent. more sulphuric acid, and 50 per cent. more water than acid. For example, in a room containing 300 cubic feet of space, 50 grammes of cyanide of potassium, 75 grammes of sulphuric acid, and 112 grammes of water are used. There are 28½ grammes to the ounce avoirdupois. It is obvious that only skilled operators should use this dangerous gas; but under proper conditions, it might well be tried on an experimental scale for the destruction of pests in hothouses. In one case, described in the *Rural New Yorker*, 10,000 young peach trees

were fumigated at one time. It is clear that if this method of destroying insects in hothouses can be applied without injury to vines, tomatoes, or various pot plants, it would be very much cheaper and less laborious than spraying with insecticides.

*Machinery.*—We saw it stated, the other day, that an Alderman of Montreal proposed that, in future, no stones should be broken for road-purposes by machinery. This reminds us of the fact, mentioned in Mr. Crabb Robinson's *Life*, etc., that in the year 1816, the Suffolk farmers near Bury, were so terrified by the frequent incendiary fire in their stackyards and farm-buildings, that they brought out their threshing-machines on to the road-sides and broke them to pieces.

We, ourselves had, in 1850, threatening letters in regard to a threshing-machine we were using on our farm in Kent, England; and we well remember, in 1852, iron stubs being driven into the ground in the wheat-fields of our dear old friend Wm. Rigden, with the intention of smashing one of the first reapers that had been imported from the States. But these plots came to naught. Wages are higher than they ever were in the old country, and the farm-labourer there understands well enough that, without machinery, the business of getting in the crops could never be carried out.

By the bye, a Canadian farmer in this neighbourhood told us, last week, that the real reason why the crops on his friends' farms are not so abundant as they used to be, is that they persist in using reapers! "*C'est la vraie cause de l'appauvrissement des terres*," said he; the straw is cut close to the ground, and there is nothing for the crop to feed on!" Fact, we can assure our readers.

*Ridding Buildings of Fleas.*—A writer in the *Practical Farmer* gives the following method of ridding buildings of fleas:—When I was a boy, father's place became infested with fleas from pigs sleeping at the barn, and they nearly drove me crazy. I heard in some way that salt would kill them. I suppose I used a peck of salt, scattering it freely about the barn and house, and at the expiration of a week we could not tell that a flea had ever been on the place. All gone. Since then I have cleared our home of them several times. One application always does the work. I have also recommended it to others who have used it with equal success. Salt scattered over a