

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 100 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, 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.—*Agricultural Gazette (Eng.)*

Commercial Agriculture.

SHIPPING SMALL FRUITS PROMPTLY.

EXPERIENCED fruit growers understand the great importance of shipping small fruits as soon as they are gathered and placed in proper packages. It is those new in the business who make the mistake in this matter, often picking one day and shipping the next. Such mistakes should not occur, but due preparation for gathering a certain amount by a given time should be planned. If delayed, send promptly what has been secured, even if obliged to make a shipment the next day, or sell at a lower figure at home, or even give away the small amount remaining upon the vines or bushes to those who will pick them.

In the warm days of July and August, one day's delay in reaching the market after the fruit is picked often means a lower price when offered in the market in competition with that which is a day later from the field. When grown extensively, arrangements should previously have been made for evaporating

or canning when the market prices for the fruit in baskets or crates is not satisfactory, and in case of a prolonged rain, causing overripeness, this manner of disposing of the amount secured in that unfavorable condition is the best. The evaporating can be done on the farm and in fruit sections there is a canning factory in most of the large towns, thus giving the choice of three markets for the fruit.

At all times place the fruit in new and clean packages. While the crate may be used several times, the baskets should not be, unless the fruit is extra fine, both in color and size, and even then the new baskets will prove a good investment. Furthermore, take pride in shipping only goods of a fine quality and appearance, upon the packages of which are stamped name and address. In this way a demand for a special brand is often established. This pleases three persons—the customer, dealer and the grower. It is the finest fruit that establishes and brings the highest prices.—*Ex.*

Summer Horticulture.

HOT WEATHER ORCHARD WORK.

JUNE, July and August are three months during which the orchard and fruit garden need special attention. The orchard is then peculiarly subject to weather conditions. If there is much rain insects destroy the fruits.

The grower should be provided with spraying pump and insecticides, and use the remedy promptly and according to directions. If the weather is dry the insects will be found at work on the trees, either eating the leaves, young growth, or webbing or tenting through the head,