CAUSES OF FAILURE IN APPLE CULTURE.

SIR,—I am thinking of setting an apple orchard, and would like some information as to soil, planting, cultivating, fertilizing, spraying, varieties for English market, etc.

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N reply we will give, in a series of two or three numbers, an address on this subject, given by Mr. L. Woolverton, the Secretary of the Fruit Growers' Association of Ontario.

Properly cared for, the apple orchard is, comparatively speaking, one of the most valuable portions of the farm, even if it is only large enough for home uses. Situated as some farmers are, at a long distance from a railway station, or a good market, the expenses of team-

ing the crop might make the odds against growing a commercial orchard; but otherwise, taking one year with another, I believe the apple crop can be made to pay twice as well, acre for acre, as a grain crop.

I am aware that I am courting opposition on this point, and grant that facts, in many instances, are against me. Even in the Niagara district, in the very centre of fruit culture, in the very best of soil and location, apple orchards just in their prime, beautiful thrifty trees of the best varieties, are being mercilessly cut down and sacrificed on each side of me. The owners declare that they are unprofitable. They say that the trees will not bear, that the apples of late are smaller than they used to be, that the worms destroy the most of them, and that the small proportion remaining for the owner to harvest, bring no price in the markets. They have therefore resolved to cut down their orchards, and dig them out by the roots, in order to devote their ground to the growing of grain and root crops which they claim will pay them better.

I grant them honesty in their statements; I myself have observed the unproductiveness of the orchards, which are no doubt duplicated in every part of Ontario, and I venture to say that one or all of the following causes will explain the unfortunate condition of affairs.

1. The Unfavorable Location of the Orchard.

A common notion is that any place will answer for the apple trees, and therefore very often a stoney corner that cannot be worked, or a very heavy clay which one does not want to work up, is set out to an apple orchard. That such an orchard will never be a success goes without proving.

But a more common fault for the location is a wet soil, left without underdraining. Trees in such situations may grow well in summer, but are almost sure to become winter-killed, or at least so injured by the cold in winter, that they become enfeebled and unproductive. The remedy is plain. A thorough system of under-draining is of the first importance.

Another evil of the situation is exposure to high winds. Those who have