of the house. The average grower will think on the face of things that a house of this form of construction will cost more to heat.

This has been tried out by growers themselves, and they have found that once they get a house to the correct heat it costs considerably less to keep it there. The iron frame houses are usually built wider and higher, and the volume of air helps a lot in lessening the fuel bill; but the very fact that the iron frame house is so rigid and in this way allows no openings for air to get in, no spreading of joints or pulling out of nails or breaking of sash bars with over-load of snow, the cost of heating one of these houses is cut down in some cases one-half that of the same area under houses of other construction. The advantages of iron frame greenhouses and the merits of this construction may be summed up as follows:

1. Cost of upkeep very small as compared with other forms of construction.
2. Solidity. The houses of this form have been in use thirty years and are still in good condition.
3. Cost less to heat.
4. Glass breakage is considerably less.
5. Lack of columns.
6. Minimum shade.

OBJECTIONS.—The main objection to houses of this construction is that of initial cost. This is often higher than that of inferior forms. To offset that the growers should figure that these are permanent houses built to stay. The upkeep is cut down because there is very little in the house to wear out. Iron frame houses are about as good an insurance as any grower can get for good crops. If he cannot grow crops in these houses he cannot in any other, that is certain. Growers agree that the best is none too good, and a poor thing is dear at any price; and those who have used houses of this stamp recommend them without any hesitation as being the lightest, brightest and most economical houses on the market.

PIPE FRAME CONSTRUCTION.

For growers having limited capital or those not desiring to build the first class construction as described previously the pipe frame construction is considered as a good investment. This form of construction has met with approval in many parts of the States during later years and many houses of this style are to be found in Ontario. However, the growers in the United States who have had these houses are now building houses using the iron frame construction and the majority state they have better houses and are more satisfied with results. Men intending building small houses which will be used only as plant houses will find this form of construction best suited to their needs in many cases. The cost is not so high as those of the iron frame style but the difference is not so much as to warrant building a large range of the pipe frame construction. Both forms are giving good service but the preference is toward the more substantial and lasting form of houses.

DESCRIPTION.

In this form of construction all the supporting members are made of iron pipe—eave or gutter supports, purlins and purlin supports. Galvanized iron pipe is used in all cases and all supporting members are set in concrete to a sufficient depth to make them solid. Wooden sash bars are placed on this frame work and held in position by means of a metal band or clasp which goes around the pipe purlin and is held to the bar by two screws.