as that for the common geranium plants mentioned. These plants can often be kept out of doors until well into October, if given the protection of a sash and frame, or brought indoors on cold nights.

CALLA OR ARUM LILLIES

These lilies should be repotted, if they require it, early in August. They like a little humus or leaf mould in the soil. One part sand, one part leaf mould or black soil from the bush to six or seven parts of good, rich, loamy potting soil will suit callas very well. Use drainage in repotting them. If the growth on these plants is well started at this time of the year, it is better to top dress the plants, as it is termed, This is done by removing about an inch of the top soil without removing the plant from the pot, and putting in the place of the soil removed, some good rich potting soil composed of about one-half well rotted barnyard manure and half potting soil. This treatment, with an application of liquid manure once or twice during the winter, will often give better flowering results than repotting them.

Toward the end of August is a good time for repotting this class of plants if they were not potted in the spring. Use soil similar to that recommended for callas and pack it well around the roots. These plants should be standing out of doors during the summer months where they are shaded from the hot sun. They should be watered and sprayed daily in hot weather. They are best stood on a layer of coal ashes to keep out earth worms. These last-named are sure to collect where the soil is kept moist, and often cause considerable trouble by choking the drainage in winter. A sprinkle of lime under the pots will serve in place of the ashes if more convenient.

CINERARIA AND CALCEOLABIA

Seedling plants of these from seed sown in July should be ready for transplanting. Transplant them when four or five small leaves have developed, into shallow, well-drained flats, into a goodloamy compost to which a good sprinkling of sand and leaf mould has been added. A cold frame with a cotton shading over, raised at both ends to admit plenty of air, is a good place for them. The shade of a tree, if not too dense, is also suitable. A piece of slightly shaded glass placed over them and tilted to throw off the rain during storms is advisable. Green fly and thrip often bother these plants. A good plan to prevent their appearance is to place some tobacco stems or tobacco dust, sweepings from a cigar factory will do, around and under the flats they are in. This will save a lot of trouble oftentimes until later on, when the plants can be more easily fumigated than when in the frames out of doors.

Seed of pansies should be sown early in flats for planting out in cold frames in September to winter over. These will make plants for early flowering in spring.

The Importance of Right Greenhouse Construction

L. W. C. Tuthill

A RIGHTLY constructed greenhouse costs more to build, but less to keep built.

It means better plants—more blooms—less care and lower running costs.

It means a perpetual satisfaction instead of recurrent disappointments.

There are several distinct types of acknowledged standard constructions, each with its fast adherents. The underlying principle of all, however, is practically the same—that of making as light a house as possible, and yet be as strong as possible.

When it gets right down to the last analysis, results in any case are what count. It is, however, an undeniable fact that every once in a while, there is a wizard sort of a plant lover who is able to grow surprisingly fine plants under most adverse conditions. Just as there are some women who can break off a slip from a plant and apparently carelessly put it in the ground, and it thrives.

Such persons, to the casual observer, almost defy the laws of cause and effect, but in reality their extreme fondness for growing things supplies them with a kind of second sense to which the plant responds almost humanly. Give these plant loving folks a heavily constructed greenhouse, with poor ventilation and imperfect heat, and in spite of the handicap they get surprising results.

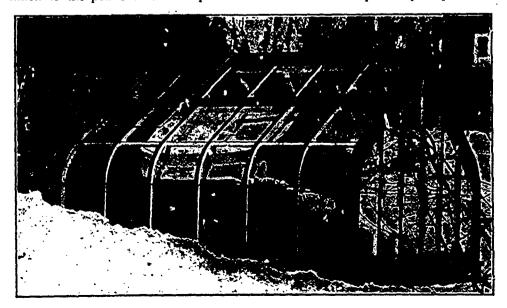
Taking your observation from what they accomplish, you argue: if they can do it, so can I. What is the use of spending additional money for a house built by the greenhouse experts when one of our carpenters here in town can build me one that will do? The answer

to that is: Are you sure you are one of the wizard folks? Even if you are, wouldn't you prefer to get the same results with less care and less actual running costs? Or wouldn't you rather have a neat attractive glass enclosed garden that looked its part, than a carpenterbuilt affair, having the appearance of a big box full of windows?

Looking at it still another way—what does your carpenter know about plant requirements? Does he know whether orchids should be grown in a north light, or the best way to locate a house in relation to the points of the compass to

grow the best roses? What concern does he give, that a wooden erected house to be strong enough, must be so heavy as to seriously retard plant growth because of the shade it casts? What does he know about the correct slant of the roof to obtain greatest deflection of the sun's rays into the house during the shortest days in winter when your plants so seriously need every ray of light and sunshine procurable?

Does your local heating man know about the temperatures necessary for different plants or whether hot water or steam is best adapted to your particular



A Small Greenhouse Built to Connect With The Cellar Where The Beiler is Located This illustration shows how attractive a little curved cave house of this kind can be. The screen on the roof near the residence is to protect the glass from the ice and snow that fall from the cave of the house.