however, this is not the case; and if it were not for the lead lines, the irradiation would be very apparent. The section of the lead is shown in Fig. 5. The two pieces of glass are put in on each side, and the lead pinched down to hold them firmly.

You will often see, in parts of a window, what might seem like useless leading, as where one large piece of glass has apparently been cut up into a number of small pieces, and then leaded together again. There are two reasons for this: First, to make these large pieces flexible. The windows in a building are always subjected to considerable variations of temperature, and are therefore liable to expand and contract. If, now, this expansion and contrac-

![Fig. 6.](image)

tion be not uniform throughout, the glass will crack, especially a large piece, which may be hampered in its movements by the very fact of its own excessive size. Second, in order to preserve unanimity of treatment. For instance, we may have an intricate piece of leading, as in the different parts of a plant, coming against a wide expanse of sky. It is necessary, not to have the treatment of the foliage look weak and of the sky coarse and brutal, to have several lead lines running through the firmament. In the Continental glass, the structure is more even throughout than the English. This is more of a defect than an advantage; for it would allow the observer to look through, rather than at, the window. In order to remedy this, they scramble their glass all over with some brown or other neutral enamel, to give it texture. This remedies the first difficulty, but introduces another: it detracts very much from the brilliancy of the window, and gives the appearance of a painted cloth transparency. There is some of this Continental glass in a French cathedral at Burlington, Vermont, near Lake Champlain, and the effect is far from satisfactory. The third manufacturers' division, enameled glass, is not much used; and when it is, the result is pretty poor. It consists of a large piece of monochromous glass with the whole subject enameled on it, mosaic work being discarded entirely. The whole effect is like a sort of intensified Continental glass, only more dull and uninteresting. Even in English mosaic windows it is impossible to do away entirely with the use of enamels, as in the treatment of the human face and the folds of the draperies. The figure shows how crudely the faces in a design have to be executed in order to counteract the effect of irradiation. Just how much or how little paint to use is a much-disputed question among artists, some affirming that the moment you put any paint on the window you detract from its brilliancy. The other side then reply, "Yes, but you lose the pictorial effect if you do not model your figures with paint," which is equally true. The only rule, therefore, open to you is to decide which is of most importance in the case before you, the brilliancy or the pictorial effect, and act accordingly.

G. T. S.

**The Comstock Silver Mines.**

The magnitude of the deep silver mines of the Comstock lode, at Virginia City, Nevada, and the expense and difficulty of working them are not generally known.

The lode itself is about three miles wide, and varies from three hundred to four hundred feet in thickness. The croppings begin to show about half a mile above Virginia City, on Mount Davidson, and from there the lode dips at an