

one-quarter of an inch to three-eighths of an inch in all. Then from either end there should be a gradual bulge amounting at the middle of the box to about one and one-half inches. Thus, when the lid is nailed on thoroughly, there will be a bulge of practically three-fourths of an inch each on top and bottom. Less bulge is desirable with the straight packs on account of their unyielding nature. There is no settling of the apples into the crevices as in the diagonal.

The proper bulge is obtained, in the straight pack especially, by selecting apples that are a trifle smaller for the ends. With apples that are being packed on the cheek, it sometimes becomes necessary to turn the end rows flat to ensure the desired bulge, and at the same time have the ends low enough.

In the diagonal pack the small spaces left at the ends of each layer aid materially in securing the proper bulge. This, and pulling the apples tighter towards the centre of each layer, is sufficient to give the necessary bulge in wrapped fruit. By packing closer in the centre you close the pockets between the apples more, and the next layer will not go so deep down in, and therefore builds up the centre. The ends being left a little looser, the pockets are opened a little more and the apples drop in further, and therefore do not build up so high. Practice alone will give the knowledge of just how tight to pack the centre or how loose to pack the ends.

Then unwrapped, of course, this difference in firmness cannot be made

and the packer has therefore to take advantage of the small irregularities and differences in the sizes of the apples. The difference in size must not be so great as to attract attention. It is essential to begin the bulge with the first layer of fruit and to pack each layer with the same end in view, placing the slightly larger or higher apple in the centre rows of each layer.

The bulge should form an unbroken arch when the box is finished, so that the pressure of the lid will be equally distributed over the fruit. A bulge high in the centre and dropping off to the sides will not be held firmly in place by the cover, causing the whole pack to become loose.

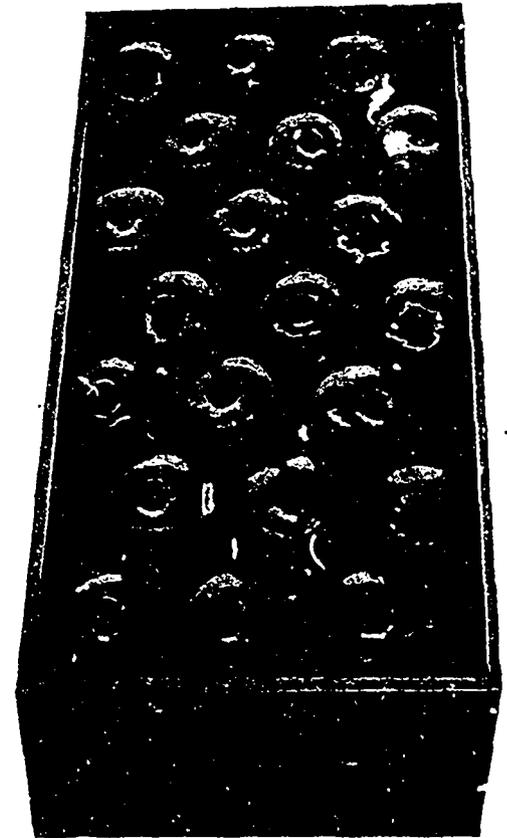
GRADING

Without good grading, rapid box-packing is impossible. To do good work and to do it rapidly, the packer must have before him an even run of apples in point of size and quality. In fact, packing, simplified, is simply grading and sizing, then placing the fruit in the box so that it fits systematically and snugly. Unless the fruit is sized properly, it cannot be made to fit systematically.

STEMMING.

To prevent the stem of the apple being bent over by the top and bottom of the box and puncturing the fruit, stemming is practised to some extent. Part of the stem is simply removed by small pincers especially made for the purpose. It is questionable whether stemming is practical in commercial box packing. In barrel packing, where only a small percentage of the apples have to be stemmed, namely, the face layer, it is an economic operation. With boxes however, two layers, the top end and the bottom, or half the apples in the box, are stemmed. For exhibition fruit this may be permissible, but there seems to be a fairly general impression in Ontario that all box packed fruit should be stemmed. It would be far more economical to pack those varieties of apples that require stemming calyx end up or on their side, for stemming must add considerably to the cost of packing. A good packer will pack half a box in the time required to stem the fruit for the top and bottom layers of a box. Thus where he would pack a box and a half when not stemming, he would only pack a box if he were required to stem the fruit. This seems an increase of practically one-third in the cost of packing, which is far too big an expense to overlook.

Wrapped fruit needs no stemming, as the wrappers prevent any puncturing by the stems. The apples give more when the pressure of the lid is brought to bear, tending to obviate any danger. Furthermore, since the fruit is wrapped, it matters very little whether the fruit is packed stem-up, calyx-end up, or on its side.



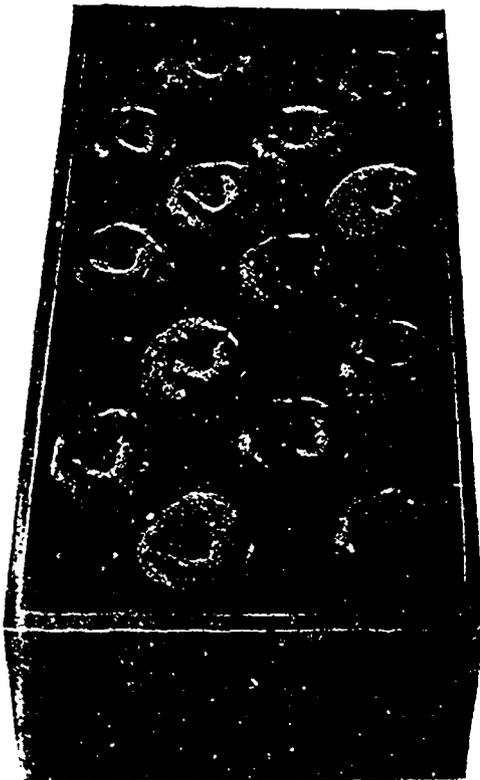
Offset Pack; 4 Layers—84 Apples

In varieties of apples, therefore, in which puncturing is to be expected, the top and bottom layers may be packed calyx-end up or on their cheeks. There is no serious objection to packing apples on their sides even when unwrapped, and there certainly is no objection to packing wrapped fruit so. It is better, however, to pack the apples on their ends whenever possible and use the side pack only when necessary.

Time to Wake Up.—On our average Ontario farm the tillage and care of the orchard is the most neglected part of the farm work. Spraying pruning, cultivating, the sowing of cover crops, the scraping off the old bark of the trees and grafting worthless trees to good fruit, is exceptional rather than general.—W. J. Baker, Warkworth, Ont.

Those who admire our fruits as they see them from day to day in boxes, barrels and baskets or on the trees, should be able to see in them real beauty and inspire their minds to produce something beautiful, yet simple, in the way of a trade mark, that would perpetuate and increase our trade in Canadian fruits from year to year.

A man or an association having only a small quantity of fruit to sell can neither command the attention of buyers nor make an impression on the market.—Prof. J. W. Crow, Guelph, Ont.



2-2 Diagonal Pack; 4 Layers—56 Apples