pint for raspberries. It will be used experimentally next year by the Department of Agriculture in cooperative experiments.

All apples from the north-western states are marketed in a box 10½ by 11½ by 18 inches, that has practically the same cubic capacity as our own which is 20 by 11 by 10, but it has the favor of the trade and the consuming public to such a degree as to warrant our adopting it for our Canadian business. Over one-half of the British Columbia apples this year have been marketed in the so called American box to

meet the demand, and it is found to be tacilitating sales considerably.

I am of the opinion that, generally speaking, where the trade favors American practice, as to packages, grades, packing, and so forth the most effective way of meeting competition is to adopt the American standards. Because of the fact of our Federal law governing many such matters and of the natural conservatism of British Columbia fruit growers, we do not as quickly arrive at conclusions with respect to trade practices as do our north-western competitors.

(To be continued.)

Packing Fruit for Exhibition and Market

E. F. Palmer, Assistant Provincial Horticulturist, Toronto, Ont.

HE box package has been rapidly gaining in favor throughout Ontario during the past few years because of its superiority as an apple package only. It is reasonable to expect too, that it will continue to gain in favor until a large percentage of Ontario's No. 1 apples, at least, are marketed in this way. And, in the face of competition with western box packed fruit together with the fact that the markets for our best fruit are gradually coming to prefer the box package it is certainly no mistake to begin to use, or continue using, the box.

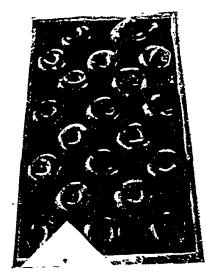
It would seem also that if the present European War is long continued, only the best fruit, the most attractive, will find a ready sale for this season at least. Prices on necessities are already going up rapidly at the time of writing (13th August), and this will mean that many people who, under normal conditions buy considerable fruit, will be unable to afford any. Fruit must be regarded as a luxury, not a necessity, and while the price of one goes up the other must go down in proportion. It must also be borne in mind that Europe and particularly Germany, is a large consumer of American apples. If this market is cut off this year, as seems likely, there will be much more fruit to be disposed of on the home markets. In the face of these last conditions, it is evident that fruit growers should make every effort this year to put out only a clear, honest, attractive pack, whether in boxes or barrels.

STYLES OF PACKS

Of the three common styles of packs, the straight, the diagonal, and the offset, the diagonal has much the most to recommend it, and is used far more than either of the others. With the straight pack each apple rests directly on the one below it and there is, therefore, great danger of bruising. With the diagonal pack, no one apple rests directly on another, but cushions in between the apple below, thus greatly reducing any

chance of bruising. The diagonal pack lends itself to a much greater variety of sizes and shapes of apples. It is far easier to make a good commercial pack with it and more weight is secured to the box as the apples fit more into the crevices, making less waste space.

The third system of packing—the offset—is generally considered inferior to



3-2 Diagonal; 5 Layers-100 Apples

the diagonal. However, it is sometimes desirable to use it with inexperienced and unscrupulous packers, as any defect in the pack is easily detected. With the diagonal system it is much easier to vary the size of the fruit in the bottom and centre layers without materially spoding the appearance on top. Again, in the off-set pack the spaces show at the sides, giving the box an unfilled appearance, whereas, in the diagonal, only small spaces occur, and these at the ends of the box. Another point against the off-set is that it contains from four to twelve apples less than the diagonal, making the box light in weight.

The term diagonal comes from the fact that the rows do not run straight across the box, but go at an angle. It includes the commonly called 2-1, 2-2,

and 3-2 packs. In beginning the 2-2 pack, an apple is placed in the left-hand lower corner of the box and another midway between the check of the first apple and the right hand side of the box. Two spaces of equal size will then be left. Into these spaces two apples are placed, it being understood that the apples are too large to fit across the box. The spaces left by the last two apples placed are then filled, and so on, until the layer is completed. The second layer is packed in the same manner, except that it is started in the lower right hand corner for the half-tier packs. This throws the apples of the second layer into the pockets formed by the first layer. When completed the third layer will be directly over the first layer and the fourth over the second.

In the straight packs the rows run straight across the box and parallel to the sides. It is very neat in appearance, but as stated above, it is rather severe on the fruit, as each apple presses directly against surrounding apples rather than into the crevices. As the straight pack should be discouraged on account of its several faults, no description of how to pack will be given here. It is necessary to remember only one thing; the apples must fit snugly across the box lengthwise and in height. It is quite apparent then that a comparatively small percent, of an orchard run of apples will be of right size to pack properly in the straight pack. If the accompanying illustrations are studied, the idea of the different packs can be seen and understood far better than from any descriptions that can be given of them.

The off-set pack, with ordinary sized apples, is started by placing three apples firmly together cheek to cheek in the lower end of the box with the first of the three in this row against the left hand side. The space then left is all on one side of the box. In this space the first apple of the three constituting the second row is placed. When the remaining two are in, the space will be on the left hand side. The layer is thus completed, the space alternating from side to side o the box. The second layer is started i the right hand lower corner by placin. the apples into the crevices formed ! the apples of the first laver. In the conpleted box the alternate layers will the be directly over one another. For th pack, as in the diagonal 2-2, it is necessary to have apples too large to fit for across the box. Similarly the 3-2 di. gonal requires apples too large to go fiv-

In the straight pack, before the lid nailed on, the apples at either end of the box should come up a little better the flush with the top. With the diagon the ends should be a little higher—about