



fruit carries much better. Wrap, too, for markets where there is competition with wrapped fruit from other districts.

In wrapped fruit the top of the box should be packed last, while in unwrapped fruit the top is packed first. Packing the top of wrapped fruit first is a very poor method and should be discouraged, as the smooth side of the wrapped fruit has to be turned down, and the loose ends sticking up are very confusing to the packer, making his work slower.

#### WRAPPING PAPER

The wrapping paper most commonly used is called the "Duplex," from the fact that one side is calendered and the other rough. This latter side is turned to the fruits as it more readily absorbs any surplus moisture. A white colored wrapper is decidedly preferable as it looks cleaner and neater than any others.

Having paper with the name or trade mark of the grower or association is an excellent method of advertising. It is not necessary to wrap all the apples in such paper, but if the outside layers are done and the trade mark is neat it adds much to the attractiveness of the package.

The paper is cut into several sizes to correspond with the different sizes of apples. The following figures give a good idea of the sizes most commonly in use:

Eight by eight inches, for five-tier and the smaller four and a half tier fruit.

Eight by nine inches and eight by ten for four and a half tier.

Ten by ten inches for four tier and the smaller three and a half tier.

Ten by twelve inches for very large fruit.

These sizes should be adhered to fairly closely, as fruit packed with too large a size paper gives a box light in weight, and also gives the consumer the impression that the price of the fruit is too high. Using paper too small is also objectionable in that a great deal of the advantage of wrapping is lost. It also increases the labor of wrapping and packing to a considerable extent, as does also paper that is too large.

Unstenciled Duplex costs about twelve cents per ream f.o.b. shipping point in small quantities. For larger quantities the price is correspondingly less. A ream contains five hundred sheets, which will pack about three boxes of apples, making the cost per box four cents.

#### TRAY FOR WRAPPING PAPER

For convenience and speed in wrapping, a tray for holding the paper is very necessary. They are made so that they can be placed on the side of the packing box.

To make one an applebox-end is usually taken and strips which project over the edge about two inches are nailed on three sides of it. On the under side a three cornered block is nailed so that one end of it is even with the open side of the tray. This forms a bracket or brace for supporting the tray when in position on the box.

Two long nails are driven into the open side of the tray, leaving about three-fourths of an inch of their length out. The heads are then cut off and the nails bent down over a piece of iron or wood a trifle thicker than the side of the box. This forms hooks for hanging the tray on to the packing box.

#### METHOD OF WRAPPING

Practically no time is lost in the operation of wrapping as a skilled packer picks up the apples with his right hand while he reaches for the paper with the left. To aid in picking up the paper it is advisable to use a rubber stole on the thumb or first finger. The apple is placed in the centre of the paper in the left hand with the side or end of the fruit down which is to be packed uppermost. The wrap is then made with both hands by a couple of quick half-turns of the wrist, the last of which brings the smooth surface up and the bunch of paper on the bottom. An expert packer should wrap and pack fifty to one hundred boxes a day, depending upon the size and grading of the fruit.

Any permanent organization, with a large quantity of fruit to sell every year, under a uniform brand which will be a guarantee of excellence, can make an impression on the market.—Prof. Crow.

## Summer Pruning

When asked recently for his opinion concerning the summer pruning of fruit trees, Prof. C. L. Lewis, of the Oregon Agricultural College, replied as follows: "I believe with trees three to ten years old summer pruning, if properly done, will have a very good influence in keeping up certain characteristics and tend to bring the trees into bearing earlier. Certain trees, like the Northern Spy, have been materially benefitted. I have seen indications all over the coast of its being a hindrance. In some cases the work has been overdone and I feel that the trees have been damaged. The tendency in mature and bearing trees is to overdo. I have seen men cut off branches six inches in diameter. I have watched a number of orchards, two or three years old, and I fail to see any benefit from such work, in fact the effect, if anything, was injurious to the trees.

"Of course summer pruning can be done in two ways. One is to help shape the tree, correct the habit of growth, and perhaps time can be gained in that way, and this type can be done any time you desire. I believe, however, it should be done moderately and that one should work with the idea of avoiding undesirable growth and development by early pinching and moderate cutting. I believe in doing considerable work of this kind with trees from three years up, and perhaps two-year-old trees.

"The second type of summer pruning is to induce fruitfulness. You can increase the accumulation of tissues around the buds and around the branches by summer pruning, but whether this will result in more fruitfulness and stronger growth, is an open question. Probably it would, like everything else, be influenced by the general treatment of the soil, the drainage it is getting, any artificial stimulation it is receiving, and similar factors. This second pruning for fruit has to be done when the trees are just in the right condition of activity. If the trees are growing too strongly the results are not secured."

Six feet by three feet apart is not too much space to devote to raspberries. We find growing them in hills about six canes to a hill is the most profitable way to have them.—W. J. Kerr, Ottawa, Ont.

Mildew, the great enemy of the English gooseberry in this country, results from planting in sandy soil. The roots of gooseberry bushes run close to the surface and consequently they become scorched. They should be planted in soil that won't heat, such as heavy clay loam. Mulch for the surface will also overcome it.—R. B. Whyte, Ottawa, Ont.