

of the apple. If the circle lacks but half an inch of being filled, or a fair sized apple will not go in, it will usually be found that by turning a few apples so that the larger diameters are in line in the circle, the space will be filled. On the contrary, if there is not room for the last apple space may be made by turning a number of the apples so that their smaller diameters come in line with the circle. Each circle on the face of the barrel should have apples in it as nearly as possible of uniform size. Any perceptible difference in size detracts from the appearance. Many packers think it worth while to carefully lay a second row of fruit over the first before the barrel is filled. A better way is to place an apple with the coloured side down over each space between the facers. A basket of apples is poured in carefully over this which finishes the work of facing.

Plate 2, Fig. 1, shows a barrel with a stave pulled out for the purpose of inspection. This, of course, does not detect packages that have been fraudulently packed by the 'stove-pipe' or 'boot-leg' method, but is a very efficient method for ordinary commercial packs, without the necessity of moving any of the apples. The stave is easily put back into place, and the barrel made as tight as before its removal. Usually the lower quarter hoop is not moved, as a sufficient view can be obtained without doing so. In re-nailing the quarter hoops great care should be taken to drive the nails in a slanting direction so as not to reach through into the fruit.

Plate 2, Fig. 2, shows one of the best makes of baskets for orchard and packing house purposes. It is strong, convenient to handle, and can be lowered into a barrel and emptied easily without injury to the fruit. A square cornered basket is objectionable about the packing house.

Plate 3 gives examples of two of the commonest facings in commercial packs, having 15 and 16 apples respectively in the outside circle, ten and eleven in the second circle, and three apples in the one case and four apples in the other in the centre. These two faces are quite suitable for all the medium sized apples of the common winter varieties.

Plate 4 has examples of faces for smaller apples where the third row consists of five apples, with one in the centre. Fig. 1 illustrates a case where the apples in the centre are not large enough to admit a single apple stem down. In this case an apple is placed calyx end down. The calyx end will scarcely reach to the head of the barrel, but acts as a wedge to keep the face tight when the barrel is filled. Although perhaps there are some objections to this it is very frequently used. It is a mistake to attempt to finish a face with two apples.

FILLING.

Filling is now proceeded with basket by basket. In no case should a basket or vessel of any sort be used for filling the barrels that would require the apples to fall even a few inches into the barrel. A basket such as is shown in Plate 2, Fig. 2, can be lowered into the barrel to the surface of the fruit already in place and can be gently tilted so as to empty its contents with a minimum of damage. This point must be insisted upon. The slight bruises which apples get in falling six, eight or ten inches into a barrel may not be immediately perceptible. Nevertheless, the tissue has been injured and in the course of a few days the injured part will show it by a flattening of the surface or a dulness of colour, and it may even be the point at which decay would begin. The remark is often made that we should handle fruit like eggs. The only fault I have to find with this advice is that it is not sufficiently drastic. It is quite possible to bruise seriously the softer varieties of apples by handling that would not break the shell of an egg, with this difference, of course, that if an egg is broken the injury is discovered immediately. Not so with the apple.

After each basket of fruit is in place in the barrel, the grader should carefully look over the fruit, and in almost every case there will be one or two apples