The specifications for a good apple barrel call for a sound stave with 9-16 inch jointing, cut 5 to 2 inches and averaging 4 inches in width at the bilge, free from large knots or shakes. The head not less than a half-inch (hardwood 5-16) in thickness, dressed, nor more than 5-8 inch, clear and sound. The hoops should be 3-16" on the thin side and 5-16" on the other, in thickness, by 1 3-8" in width, and cight in number.

In Nova Scotia the use of split hoops is quite common. These are made of birch or alder, and though they do not have the neat appearance of the cut

elm hoop, they are very strong and cheap.

UNEVEN STAVES.

Apple barrels are for the most part manufactured from No. 2 staves. A careful measurement of a number of barrels from the best apple sections of Ontario showed that, while the general average thickness of the stave was 6-16", yet there was sometimes in the same barrel a variation from 4-16" to 7-16"; and in one instance at least the 4-16" stave was next to the 7-16" stave, leaving a shoulder of 3-16".

This is a very grave defect, inasmuch as it leaves a sharp shoulder between the thin and the thick stave. When the apples are pressed into the barrel this sharp shoulder cuts into the fruit, and all the apples from the top to the bottom touching this union of the thin and thick staves will be marked more or less severely according to the difference between the thickness of the two staves.

BROAD STAVES.

A four-inch stave is the maximum width for a good barrel. Wide staves are a source of weakness. Should the barrels get somewhat dry, the danger is greatly increased. The wide stave absorbs the moisture from the apple on the inside, which has a tendency to expand, and thus overcome the curvature of the stave as it is placed in the barrel. If at this time the barrel should be exposed to the heat of the sun, the tendency would be to contract the outside of the same stave. The combined effect of the moisture within and the heat of the sun without is to cause the stave to "buckle," which, of course, results in a slack barrel.

SECOND-HAND BARRELS.

It cannot be too strongly impressed upon apple growers that they should use no packages which are not absolutely clean and bright. It is a mistake to use second-hand barrels even for the local market. For the export market it is absolutely impossible to make a profit if second-hand barrels are used. These will be sold by themselves, and notwithstanding the quality of fruit that may be in the packages, they will, on the general market, be sold at a reduced price.

BARRELLING IN THE ORCHARD.

It is probable that a very large part of the fall and early winter apples will be packed for market in the orchard. Excellent work can be done there if proper provision is made for both picking and packing. Even where the packing is done in the open air, there should be a convenient shelter to protect the packing bench, barrels, etc., during wet weather. It is also a labour-saving device to have this shelter large enough to serve as a temporary packing shed. Should rain threaten, it will often expedite matters to set all hands picking in orchard boxes or other convenient receptacles and haul to the packing shelter, where packing may go on under conditions that would be impossible if no shelter were provided.