

SUMMER APPLES IN COLD STORAGE

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DURING the summers of 1903 and 1904 I conducted several experiments with summer apples in a refrigeration building of the Hanrahan type. Two main objects were kept in view: first, to illustrate the advantages of an efficient type of ice refrigerator to the farmer; second, in accomplishing the above end, to show the value of storing non-keeping varieties of summer apples. In the working out of the latter, owing to a number of experiments being suggested by the differing conditions encountered, the work resolved itself into the handling and methods of storing apples.

The apple used, in the majority of the experiments, was the Duchess of Oldenburg. This apple is largely grown in eastern Ontario and in the eastern provinces, and is a typical mid-summer apple. The fruit is medium to large in size, of a light yellow color striped with bright red, and has, when mature, a very agreeable semi-acid flavor. It is, at best, a poor keeper, retaining its flavor and texture only a short time after maturing, if kept under ordinary temperatures. For this reason and because of its popularity on local markets, especially in more northerly districts, it was chosen as a basis for experimentation.

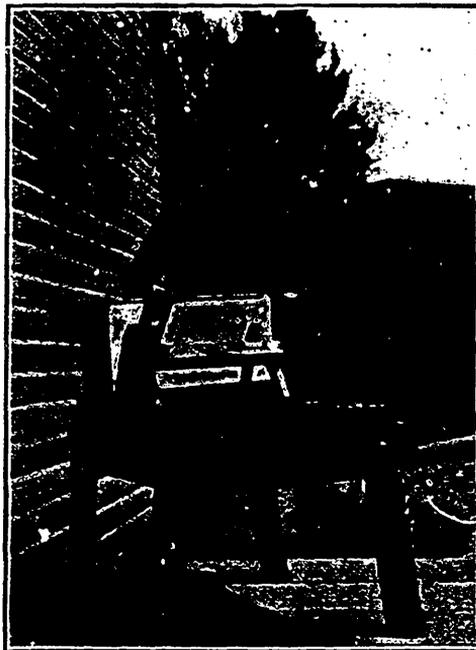
METHODS OF PACKING.

Four methods of packing were adopted: (1) Stored in ordinary bushel boxes; (2) ditto, each specimen being wrapped in a quarter-section of unprinted newspaper; (3) wrapped in tissue paper and again in waxed paper similar to that used in wrapping butter; (4) packed in small kegs of sawdust. Sixteen bushels were stored, four separate pickings and four separate packing methods.

Pickings were made on August 4, 15, 25, and September 1. The apples picked on August 4 were immature in every way, being only slightly colored and acid in flavor. Those picked on August 15 were also im-

mature but were fairly well colored. Those picked on August 25 were almost ripe, lacking only the yellow tinge to being fully colored and being only very slightly acid in flavor. Those picked on September 1 might be said to be dead ripe.

The two first lots, immature when picked, retained their immaturity throughout. On November 15 several were spotted on the green or uncolored side, the spot somewhat resembling a sun-scald. They still retained their acid flavor, but shortly after lost even this and became flat and tasteless. The lot picked on August 25 were, on December 15, perfect in texture and flavor, although they had at this date evidently reached their limit of keeping. Shortly after a distinct falling off in flavor was noticed. Those picked on September 1,



Ready For Pressing—No. 1.

A handy device used on Coldstream Ranch, Vernon, British Columbia, for the packing of fruit, is here shown. The box of fruit that can be seen is ready to be pressed so that the ends of the cover may be firmly nailed. Before applying pressure by means of the bar of wood over the box the small wooden frame work, leaning against the box, is placed on top. The pressure is applied on this framework to prevent injury to the fruit. As this framework is not as long as the box there is plenty of room at the ends for nailing.