

A NET FOR THE COLLECTION OF WINGED HARDWOOD FRUITS

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The collection of fruits from such hardwoods as maple, elm and ash has been done normally by whipping the fruits from the tree with a bamboo pole and catching them on cotton sheets, which are spread on the ground surrounding the tree. On windy days it is difficult to catch half of the fruits released, and in the case of white elm a slight breeze can make collection almost impossible. In order to reduce the ground area which must be covered with cotton sheets, and to reduce the time wasted due to windy weather, it was necessary to find some means of stopping the fruits in flight and allowing them to fall to the ground, where they could be collected.

A practical solution to the problem was found by supporting a net on standards, on the leeward side of the tree to be picked. Four telescopic aluminum alloy standards, each with three sections, having a maximum extended height of twenty feet, are raised and supported by means of three guy ropes fastened to eyes on a collar, at the top of the middle section. The individual sections of the aluminum standard are each twelve feet in length but are only extended to about one-half their length in order to give the standard sufficient rigidity to resist the force of the wind on the net. The sheets are raised simultaneously by means of ropes passing through pulleys at the top of each standard, and their edges are fastened together with cord which is passed through grommets found at a three foot spacing along the edge of the sheet. This fastening prevents the wind from blowing fruits between the sections of sheet. It has been found useful to place the net on the windward side of the standards and in this way reduce the billowing of the sheets.

A nylon net would reduce the weight and bulk of the nets and thus the strain on the standards, of particular importance with a heavy wind.

The basal portion of the standards does not have a diameter large enough to allow for, a free telescoping of the middle section. A section having a 2.375 inch O. D. , 2.067 inch I. D. , .154 inch wall thickness, might serve the purpose better.

Metal clips could be used to join the sides of the sheets and reduce the time taken to tie the sections together.

Materials:

Cotton net, 1/8" mesh, 40" width, 300 yds. @ 77-1/2¢ yd. - - - -	\$232.50
Cotton duck binding, 6 oz. Single Fill, 120 yds. 3" width cut from 10 yds. 36" width @ .77¢ -	7.70
Manila rope, 5/16" diam., 12 ropes @ 10 yds. = 120 yds, or 10 lbs. @ \$1.00 -	10.00
Aluminum tubing, Spec. 65 S-T	
4 lengths 1-1/2" O.D. x .065" wall x 12' - 16-1/2 lbs. -	20.08
4 lengths 1-3/4" O.D. x .095" wall x 12' - 27-1/2 lbs. -	26.81
4 lengths 2" O.D. x .120" wall x 12' - 39-1/2 lbs. -	38.42
	<u>\$85.31</u> 85.31
Nuodex Preservative, 10 gals. @ \$2.45 =	\$24.50
Mineral Spirits Solvent, 5 gals. @ .84 =	4.20
	<u>\$28.70</u> 28.70
Pulleys, guy rope collars, guy rope cleats, soil shoes for standards, all made by Research Div. Lands & Forests - - - -	10.00
Total cost of materials - - - - -	<u>\$374.21</u>

Cotton Net obtained from - A. B. Fisher & Co. Ltd.
147 Spadina Avenue
Toronto, 2-B, Ont.

Aluminum Tubing obtained from - Drummond, McCall & Co. Ltd.
373 Front St. East
Toronto, 2, Ont.

Nuodex Preservative obtained from - Canadian Industries Ltd.
Paint and Varnish Division
Foot of Laughton Avenue
West Toronto, 9, Ont.