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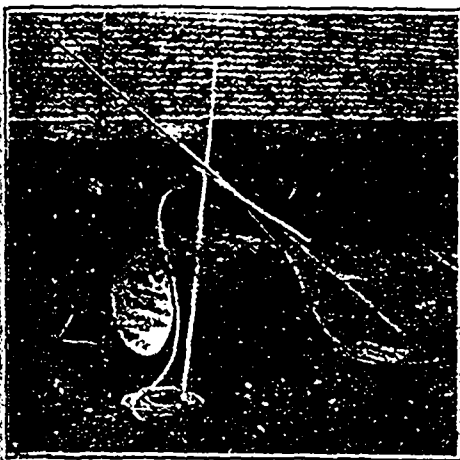
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A Few Spraying Notes for Beginners

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THE initial cost of a pump and outfit deters many persons from spraying their orchards although it is very small as compared with the profits obtainable as a result of intelligent spraying. In purchasing be sure and



A Barrel Outfit, Unmounted

secure a pump of large enough capacity to do all the work required in the least possible time. Remember that the extra amount of time and labor required to spray an orchard with a small pump may in one or two years more than exceed the extra first cost of a larger pump. An outfit such as is itemized below is large enough for an orchard of one hundred to one hundred and fifty trees. The catalogue prices, on which there may be a small discount, are approximately as follow:

50 gal. all brass pump (extra if porcelain lined)	\$15 00
1/2 in. 1/2 inch hose, with connections, stop cock, 9 ft bamboo extension rod and double nozzle	7 60
brass wire strainer50
	\$23 10
Mounted on barrel on skids, extra	2 50
	\$25 60

This amounts to about twenty-five cents a tree first cost for an orchard of one hundred trees. This cost may be charged to the orchard for six years, the life of a pump under fairly favorable conditions, and allowing four dollars forty cents for repairs during that time, then the cost only amounts to five dollars a year for the whole orchard. Spray material cost about as follows in New Brunswick:

RETAIL PRICES IN FREDERICTON (APPROXIMATE)	
Concentrated lime-sulphur per 40-gallon cask	\$8 75
Concentrated lime-sulphur per 20-gallon cask	4 75
Concentrated lime-sulphur per 5-gallon drum	1 75
Lead arsenate, per single pound	.25
Lead arsenate per 5 pounds	.20
Lead arsenate per 10 pounds	.17 1/2
Lead arsenate per 25 pounds	.15
Lead arsenate per 50 pounds	.13
Lead arsenate per 100 pounds	.12
Paris Green per single pound	.25
Bluestone per single pound	.10
Bluestone per 50 pounds	.08
Lime per 100-pound cask	.00 1/2

Then the cost of sprays ready for use, counting water free are as follows:

WHITE SPRAYS	
4 gallons concentrated lime-sulphur at 22c ..	88c
36 gallons of water	00c
Total cost per barrel of spray	88c
SUMMER SPRAY OF POISONED LIME SULPHUR	
1 gallon concentrated lime-sulphur at 22c ..	22c
2 lbs. lead arsenate (in 5 lbs. lots) at 20c	40c
39 gallons of water	00c

Total cost per barrel of spray

Note.—The cost of the lead arsenate would be considerably less if purchased in larger quantities (see table of prices).

SUMMER SPRAY OF POISONED BORDEAUX	
4 lbs. bluestone at 10c	40c
4 lbs. lime at 1/2c	02c
1/2 lbs. Paris Green at 25c	13c
40 gallons water	00c

Total cost per barrel of spray

Time applying spray 1 1/2 hours per barrel.

Two men and horse 1 1/2 hours

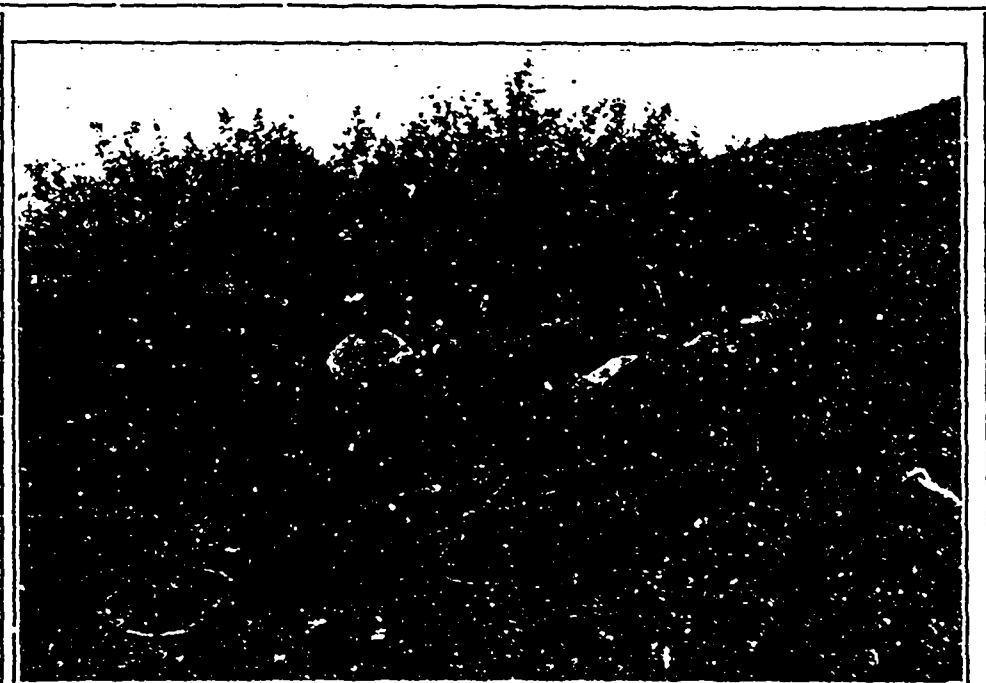
No provision is made in the foregoing for the cost of mixing solutions and

filling up the barrel. In spraying very large trees a small spraying tower of some sort will be necessary and can be very easily made at home at a small cost.

HOW TO SPRAY

Spraying should in nearly every case be done with the wind. When spraying the first side of large trees, stop the wagon or spray cart just as it comes within a few feet of the tree and spray the nearest side as far in and as completely as the spray can be driven; then, drive directly opposite and spray all the central parts thoroughly, then, move just past the tree and spray the last part as far in as possible. In this way, nearly two-thirds of the tree will be covered and when the wind changes it will be easy to complete the spraying from the other side. A very strong wind wastes a little of the mixture, but it is very seldom that there is any need of ceasing operations because of its violence. In spraying small trees it will not be necessary to stop so long at each tree.

Go through the orchard as soon as the spray has dried on the trees, and if you notice limbs or portions of the trees here and there that have been missed,



The Barrel Outfit, Mounted, Used in the New Brunswick Demonstration Orchard Work