(3) That, in ninety-one other places, trees planted within the last few years were found infested—in most cases only one or two at a place; that these trees were all destroyed last year, and this year's inspection failed to discover scale in any but thirteen out of the ninety-one places.

(4) That the scale has been found in five nurseries, but the infested stock therein has been destroyed, and under present regulations all nursery stock must be fumigated with hydrocyanic acid gas before it is sent out.

The commissioners expressed themselves as being in doubt as to the possibility of checking the further spread of the scale and eventually exterminating it by the destruction of the trees as provided by the San José Scale Act and amendments thereto. The further spread of the scale can certainly be checked to a great extent by the destruction of infested trees as they are discovered, and the Inspector thinks that the scale can be exterminated by prompt and vigorous enforcement of the Act; but with the evidence before them, especially as to the great difficulty of making a thoroughly reliable examination of trees, the commissioners incline to the opposite opinion; and they are fully satisfied that extermination, if possible, can practically be secured only by a very large expenditure of money, and something like a guarantee that the work will be done promptly and the object undoubtedly accomplished in order that those who lose trees may be exempt from further infestation and run no risk in replanting.

There is not much ground for alarm as to re-infestation from the American side of the Niagara river. The commission report that the opposition to the provisions of the San José Scale Act is not unanimous. The great majority of those whose orchards are infested or in immediate danger are strongly opposed to the enforcement of the Act on the present lines, while nine-tenths of the witnesses whose orchards are not supposed to be in immediate danger are in favor of the Act, but advised an amendment which would provide for larger compensation. The commission was not able to secure sufficient data to enable it to form a definite and reliable judgment as to the vitality of the scale and the injury likely to be done by it in our Canadian climate.

Considerable fault was found in some places with both the character and manner of the inspection, and the conclusions of the commissioners on this question are as follows:

(1) That, with perhaps exceptional instances, the work of inspection has been faithfully done.

(2) That the head inspector, Mr. Geo. E. Fisher, has very earnestly and faithfully endeavored to carry out his instructions without fear or favor.

(3) That some of the sub-inspectors have not had the training necessary to enable them to distinguish the San José scale from other scales which somewhat closely resemble it.

(4) That a good deal of irritation and ill-feeling in a few cases has been caused by inspectors entering orchards without informing the owners, and by the severe blazing of trees with axe or spade.

As to changes or modifications in the method of procedure and suggestions relating thereto the commissioners make a number of recommendations, some of which are as follows:

(1) That the work of inspection, in a modified way, be continued for some time.

(2) That the knowledge of sub-inspectors be tested and none but certified and approved men be employed.

(9) That owners be paid one-quarter of the value of their trees without discount, and that the fruit on a tree be regarded as part of its value.

(10) That the method of valuation be modified so that the owner may be represented in some way.

(12) That the fumigation of nursery stock be done under official supervision, and that nursery men be required to attach to every parcel of stock sold, sent out, or disposed of a certificate of a specified form to the effect that said stock has been fumigated according to the regulations.

In concluding the report, the commissioners make the following suggestions:

(1) That the utmost care be taken to prevent the scale from spreading.

(2) That valuable trees be not destroyed when it may seem possible to save them without serious risk of infesting neighboring stock.

(3) That the owners of orchards, especially those who are directly interested by infestation or exposure, be enlisted, as far as possible, by and with the official workers in the effort to exterminate the scale.

(4) That a brief circular of instruction *re* the most important facts in the life history of scale-insects and of San José Scale in particular, and the approved methods of treatment, be prepared at once and sent to every orchardist in the infested areas.

(5) That a plan something like that submitted herewith be adopted, to encourage every owner of an orchard in the province to make a careful inspection of his orchard next winter with a view to discover whether or not there is any San José Scale in it.

Prize Money Withheld at the Industrial Fair

At a meeting of the Board of Directors of the Industrial Fair held last week the report of the Cattle Committee was presented containing the statements of the veterinarians to the effect that no contagious disease existed among any of the cattle at the recent exhibition. A statement was read from the manager of the Miller & Sibley Jersey herd, in which he admitted having had some milk injected into the udders of the cows shown by him at the Fair, from the effects of which they died. The board decided to retain all the prizes and money won by this firm, and also to restrain them from showing at the Toronto Industrial Fair for one year.

The following statement of the receipts of the Fair for the past three years will be interesting:

	1897.	1898.	1899.
First day	$ 751	$ 619	$ 3,148
Second day	3 065	2,930	5,547
Third day	3 352	6,432	4,150
Fourth day	3,869	4 812	1,644
Fifth day	5 285	6,208	6,596
Sixth day	18,269	19,915	22,534
Seventh day	8,726	10,832	8,336
Eighth day	15,260	20,572	18,218
Ninth day	11,640	21,660	13,967
Tenth day	4,519	4,541	4,194
Totals	$74,736	$97,611	$88 334

Decrease from 1898—$9 277

Increase over 1897—$13,598

The Saving of Soil Mixture

Press Bulletin Tennessee Agricultural Experiment Station

Capillary action, or movement of water in the soil, is due to the tension of the soil particles. If the particles are coarse, the action is weak and the soil cannot hold much water. If the particles are fine and the soil compact, the capillary action is strong and a large amount of water will be held unless lost by evaporation.

Moisture may be retained in the soil by subsoiling, plowing, harrowing, cultivating, mulching, rolling, and by the addition of humus or decayed vegetable matter.

Subsoiling increases the depth of clayey and compact soils and allows more water to enter them instead of running off on the surface. Subsoiling is thus an important means of preventing washing, and it also enables the roots to penetrate deeper, thus increasing the feeding area. Both spring and fall subsoiling are of advantage on stiff, heavy land.