

## GARDEN & ORCHARD.

### The Keeping Qualities of Spies.

There has been some complaint during the season of 1910-11 that Spies have not kept well. I am free to admit that the complaint can be made any year, and that in any year it can be shown that the causes are comparatively local.

The Spy is a favorite apple in Southern Ontario, in latitude 42, with an elevation less than 700 feet. It is also a favorite in Simcoe County, in latitude 44½, again with an elevation less than 700 feet. Between these two extremes of latitude there are numerous orchards, but at a much greater elevation, a few of them at an elevation of even 1,200 feet. In this latter case, however, the trees are scarcely hardy, and comparatively few are grown. With this range of elevation and latitude, one must accept a wide range of climatic conditions, and these climatic conditions affect materially the keeping quality of the fruit.

Quite apart from latitude or elevation, and almost equally important, is the "lay of the orchard." If the slope is towards the south, and fairly steep, the climatic conditions are altogether different than if the orchard is on a level piece of ground or with the slope distinctly towards the north. The fruit on the northern slope will mature later in the fall, and it is just possible that an orchard sloping sharply towards the south may mature its fruit a week or ten days earlier than another orchard half a mile away sloping sharply towards the north; and it may just happen that this difference of one week, in the case of a warm fall, may make a difference between good-keeping Spies and poor-keeping Spies. Of course, other varieties would be affected relatively.

And then, quite apart from all conditions that we may fairly class as natural, we have the individual treatment of the fruit with reference to culture, time of picking, and the conditions under which it is stored.

Another point must be kept clearly in mind in discussing this problem; that is, that the seasons vary very greatly, not only in their length, but in the total amount of heat and moisture available for plant growth.

Speaking specifically of the season 1910-11, it will be noted that the summer, and perhaps the fall, of this season was mild, and well calculated to mature fruit. I speak particularly of the country south of a line drawn from Sarnia to Hamilton. Indeed, in parts of the Province it was exceedingly dry in the summer and fall months, and fruit ripened almost prematurely. The higher and eastern parts of this particular section had more moisture, but was still good, such as would mature fruit early and well. These conditions, while making it exceedingly pleasant for apple-picking and corn-husking, were not conducive to good keeping qualities, inasmuch as very few farmers appreciated that every day after their Spies were matured that they hung upon the trees was just so much deterioration in the keeping quality. I can speak with certainty with reference to Spies that were picked and placed in cold storage, grown in Southern Ontario, that came out a few weeks ago in perfect condition, with little or no loss. But, speaking generally, there was considerable loss in Spies. The Spy is not considered one of the late winter keepers by experts, but the average run of merchants and apple dealers class the Spy, King and Baldwin all in one group, and appear to think that there is something abnormal when the Spy and King show a loss, and the Baldwin no loss. It may be that the elements tending towards decay have just reached the condition of affecting the more delicate Spy and King, but have not yet been severe enough to materially affect the Baldwin, the Pewaukee, the Stark, or the Ben Davis; and so we are inclined to look for some extraordinary circumstances, when, as a matter of fact, it is only the ordinary natural conditions which vary in intensity from year to year.

I was privileged, about April 1st, to examine a large consignment of Spies grown and stored in ordinary warehouses at Thornbury. These Spies were opened up in Ottawa, and did not show one per cent. of loss in a carload lot. The reason for the perfect condition of these Spies, when traced back, is simply the climatic conditions which, though somewhat unfavorable for keeping qualities this year in Southern Ontario, were just right, being a little warmer than usual, for Northern Ontario, but giving a perfectly-matured fruit of normal size and color, and ripening just in time to escape being frozen solid on the trees. Consequently, they were stored immediately at a temperature near freezing point, and remained at this practically all winter, till opened for sale. Some apples, grown in Southern Ontario, picked under the same conditions, but much earlier, and stored immediately in cold storage in London, were taken out in the latter part of March in per-

fect condition, showing little or no loss. Of course, it is easy to see that some of the apples taken out of cold storage showed a large loss, but where this is the case, it immediately presupposes bad handling before they went into cold storage.

It is a mistake, also, to think that the loss in apples is confined to Spies. This is by no means the case. Greenings showed a large loss this year where they were kept in ordinary storage and were not disposed of early in the season; and I believe that if exact records were taken of the earlier winter varieties, it would be noted that all these were somewhat earlier than usual, and all would show a loss where any attempt was made to prolong their season.

The remedy, therefore, for this loss in storage depends in some degree upon the mode of culture, of which I say nothing, but more particularly upon the time of picking and the promptness with which they get into an atmosphere as nearly 32 degrees as possible. If the climate enables one to do this in ordinary storehouses, well and good. If the climate is not suitable for this purpose, then artificial refrigeration must be resorted to, if the same results are to be secured.

In noting all the causes, I should like to put in a word for exceedingly small wounds, some of them almost too small to be detected by the naked eye, that are accountable for rot spots. Insects of various sorts will sometimes make a very slight prick in the skin, allowing the development of rot spores. Sometimes the ordinary scab will appear a mere speck upon the skin, so small as scarcely to be noticeable, and yet it will often be found that the decay on the diseased apple started in one of these minute specks. I examined, a few days ago, a number of decayed apples, just as they came from the package, and in no case could I find a decayed apple where there had not been ample evidence of a slight break in the skin. I mention this to show that many conditions, besides climatic, have to do with the keeping qualities of apples.

A. McNEILL.

### California Fruit Notes.

Editor "The Farmer's Advocate":

In your issue of April 6th, page 597, you quote someone concerning the pruning of the Vinifera Vine. The said "someone" is evidently not in close touch with grape-growing in California. While more than half of the vineyards are grown and pruned without stakes, as illustrated, yet a large portion are staked and trellised. I have twelve acres of Thompson's seedless raisin grape vines that are staked. Each vine has a stake, to which it is tied. My neighbor, adjoining, has a twenty-acre piece of the same kind of vines, staked as mine, with the addition of two wires stretched along each row of stakes. Several varieties of table grapes, also, have to be staked.

Most of our pruning is done by Japanese coolies, who are paid by the thousand vines, and, of course, they are in a hurry. They cut the vine anywhere between the nodes, and yet old vineyards do not show any evil effects therefrom.

It may interest Canadians to know that a heavy frost a couple of weeks ago cut the California peach and raisin crops in two. It is evident that high prices will rule for raisins and dried apples for the next 18 months.

Fresno Co., California. HIRAM PETTIT.

### San Jose Scale Weakening.

In a bulletin entitled "Insects Injurious to the Peach Trees in New Jersey," by John B. Smith, Sc. D., Entomologist at the New Jersey Agricultural Experiment Stations, in addition to the space devoted to other insects, a very full account is given of the San Jose Scale, its life-history, injury caused, and remedial measures, being given in detail. These have been treated fully in past issues of "The Farmer's Advocate," but we refer to the account in the bulletin because of a hopeful feature in the situation in the opinion of the author. To quote: "Very old and rough-barked trees sometimes resist perfectly, and, at the present time, the scale has lost some of the virulence of its early days." At the close of the section devoted to this insect, reference is again made to its lessened vigor, as compared with its earlier years with us, in the following words: "There is no doubt that this insect has lost much of its original vitality during the years that it has been with us, and that it is now much less resistant to our climatic and other conditions. With the insecticide battery now at our disposition, it need no longer be greatly feared, though it is not to be despised by the well-informed fruit-grower."

A five-dollar bill may seem good enough to save just now, but it will look like thirteen cents four years from now, when you sell a colt for fifty or a hundred dollars more than the colt from a cheap-service stallion would bring.

## THE FARM BULLETIN.

### New Brunswick Agricultural Appropriations.

The late session of the New Brunswick Legislature was not productive of any new agricultural legislation, but there was a substantial addition to the appropriation for agricultural work, new lines being the encouragement of horticulture and the encouragement of poultry-raising. Under the act constituting the Department of Agriculture, very wide powers are given the Commissioner of Agriculture, who can, through Order-in-Council, develop new lines of work, without need of further legislative enactment.

The policy of encouraging the organizing of new agricultural societies was assisted by the Legislature in an increase for the appropriation for grants to these societies from \$12,000 for 1910, to \$14,000 for 1911. Three years ago the appropriation was only \$8,000. There were then only 58 societies, against 94 at the present time.

The following are the appropriations for 1911:

Administration of Department, including salary and expenses of the Commissioner, and contingencies	\$ 6,333.33
Grants to Agricultural Societies.....	14,000.00
Bonuses to butter and cheese factories	1,000.00
Encouragement of dairying .....	4,500.00
Dairy School .....	2,000.00
Farmers' Institute and educational work .....	3,000.00
Grant to Maritime Stock-breeders' Association .....	800.00
Grant to cold storage at Sussex.....	750.00
Encouragement of horticulture.....	4,000.00
Encouragement of stock-raising.....	4,000.00
Encouragement of poultry-raising.....	2,000.00
Extension of markets for agricultural products .....	3,000.00
Railway fares for students attending agricultural colleges .....	400.00
Standing-crop competitions .....	500.00
Bonuses to roller-process wheat mills.	1,000.00
Grants to assist agr'l exhibitions.....	10,215.00
Miscellaneous .....	400.00
	<b>\$57,898.33</b>

The new work undertaken this year in horticulture includes not only the oversight and maintenance of some twenty-five illustration orchards in different parts of the Province, but also demonstration work on matured, bearing orchards. Three of these have been taken hold of by Provincial Horticulturist Furney, one at Corndale, Albert County; one at Mauderville, Sunbury County, and one at Douglas, York County. These orchards have been pruned and thoroughly sprayed twice, and further sprayings will be made. The fruit will be thinned, and when harvested will be carefully graded, packed and marketed.

The Poultry Superintendent is devoting most of his time to the holding of meetings and giving demonstrations of actual work. He gives instructions in the building of colony houses, and assists in the co-operative marketing of eggs and of poultry, and has been assisting all who wish to start with pure-bred flocks to get good stock and good eggs.

The work for the extension of markets has been principally in helping to place New Brunswick potatoes on the Cuban market.

The encouragement of stock-raising takes the form of importing pure-bred stock when there is a shortage among New Brunswick breeders, and assisting in the holding of central auction sales of pure-bred stock.

The other items mentioned are not new, and are self-explanatory under the headings given. The increase of the agricultural appropriation for 1911 over 1910 is about \$7,000.

### Wiping Out a Postal Deficit.

United States Postmaster-General Hitchcock announces that at the end of the fiscal year the \$17,500,000 deficit inherited two years ago will be turned into a surplus. For the first six months of the year the revenues were \$118,573,817, and the expenditures but \$40,863 more. Since the administration began, 3,089 new post-offices were opened, delivery by carriers provided for 142 additional cities, and 2,124 new rural routes of 51,230 miles in length opened; 8,274 men have been added to the staff, and salaries have been increased.

The rural carriers now receive \$871 salary, on an average. The railways receive the same rates for carrying the mails, and there was no increase in postal rates. The wiping out of the deficit has been effected not by curtailing service or cutting down salaries, but by stopping small leaks, improved methods of handling postal business, and requiring full work for good pay. It is believed that a parcel-post system will soon be in sight.