

exception, and that was upon a Pound Sweet tree the others being upon Russets. This Pound Sweet graft bore very large, handsome and excellent Sops-of-Wines, but the rest were worthless.

Some thirteen years ago, I was speaking of this to the late Albert Noyes, of Bangor, Maine, who said he had had many similar experiences, especially in getting extra sized fruit for exhibition by grafting upon Alexander, all varieties seeming to grow larger and handsomer when so worked. But this size was got at the expense of quality.

A more curious matter still is, that by grafting "in and in" upon the same tree the change produced can be much intensified. By "in and in" grafting, I mean grafting a scion upon the limb of a tree, then next year taking a scion from the graft and grafting it into the same tree; next year take a scion from the second graft and insert it in the same tree. This may be repeated again and again, the result being that you will have all grades between the original fruit of the graft and the original fruit of the stock. To be quite successful there must be difference enough between the stock and first scion to start a change. But by "in-and-in" grafting the effect is often so marked from one year's graft to the next, and so on, as to make a positive demonstration of the actuality of this which I call "graft crossing."

R. Dibble, of Brantford, Conn., was the man who, in June, 1873, first called my attention to this method of intensification of the graft cross by grafting in and in. He wrote: "About forty years ago, my father had a large and thrifty apple tree that bore exceedingly sour fruit. I helped him graft a part of it from a very sweet apple standing near. The second year we grafted another part from the scions set the previous year. The third year we grafted the rest of the tree from the

second setting. These grafts produced three different kinds of fruit, all differing from each of the original stocks. The first strongly resembled the sweet apple, but were only moderately sweet. The second were slightly striped, like the sour apple, and neither sweet nor sour, while the third were clearly striped, and a moderately sour apple." Mr. Dibble, adds, "No man can graft a Rhode Island Greening on a sweet apple stock and another from the same on a sour stock, and have the same fruit in appearance and taste as the original from each tree. To say the least, I have never been able to do it. I have a number of them, but no two are alike."—T. H. HOSKINS, in *Vicks's Magazine*.

#### THE ERIE BLACKBERRY.

In the multiplication of varieties, the blackberry has not kept pace with the raspberry and strawberry; yet the last five or six years have witnessed the addition of some very valuable new sorts to a list which was, and is still, by no means very large. Among these kinds two deserve special mention: the Early Harvest, particularly for its extreme earliness, which gives it sole control of the markets far in advance of all other sorts, and Wilson Junior for its size and productiveness. Intermediate between these two, in regard to its season of ripening, stands the "Erie," named thus by Hon. Marshall P. Wilder in consideration of its place of origination, which is near Lake Erie, in northern Ohio.

We have good reason to believe that the Erie is the "coming blackberry," and will give to the fruit grower what has been looked for so long in vain—a variety with the iron-clad cane of the Snyder and the large fruit of the Lawton or Kittatinny. At Monmouth it has passed the last two winters without protection entirely unharmed, while all