

attempt to produce an early-laying strain I believe was largely caused by two factors: the increased vigor and strength of last year's stock, due to their life in the cold, fresh air, and to the rapid development of the next generation under a straight grain and dry-meal diet, kept constantly before them.

While these observations were made from work that did not even nearly approach what might be termed an experiment, and, while the term of duration was too short to permit of anything other than inferences, rather than conclusions, being drawn, the results are interesting, considering the humble equipment and the very ordinary foundation stock.

First, it would appear that, although it is advisable to begin operations with the best stock obtainable of the breed it is desired to keep, the average flock may be wonderfully benefited by a very simple method of selection along whatever lines it may be desired to bring to a state of excellence. In this country, early-laying qualities are, perhaps, the most sought after, for obvious reasons.

Second, that, while the word "vigor" may have appeared in the foregoing almost to redundancy, that word, when applied to the male bird, cannot be emphasized too strongly in my experience.

Third, that the mating of a two-year-old male with thrifty, early-matured pullets gave me excellent results. Possibly, I might have obtained equal results with two-year-old hens and cockerels. During the past three years, however, I have not kept the females after their first year. Also, I was anxious to reap whatever benefit might have accrued from selection, as shown by each generation.

Fourth, that the hopper system of feeding, aside from reducing the labor of feeding operations to a minimum, gave excellent results as regards inducing early maturity. I think the same might be said of dry-feeding generally. It gives much less labor than does any other system, promotes early maturing, and increases the vigor of the stock. Of course, the food itself is of prime importance. It is my own belief that an unrestricted range, from the time a chick can eat such foods, wheat, with a little cracked corn, and skim milk ad lib., forms the food par excellence. Wheat may be an expensive food, but it gets results every time. Of course, in this case, the chicks have access to other dry feeds, as well—a mixture of bran, shorts and barley meal, two parts, and corn meal and gluten meal, one part, helping to round out their ration. Wheat, however, was their piece de resistance.

Anyway, it looks as if I were going to get those fresh eggs for breakfast. AMATEUR.

GARDEN & ORCHARD.

New Brunswick's Great Apple Show.

That New Brunswick, the Rip Van Winkle among the fruit-growing communities of the world, has recently awakened to take her place in the world's march of progress, is convincingly shown by the great apple show just drawn to a close at St. Andrew's Rink, in the City of St. John. A solid acre of apples, of which over 1,400 were plate exhibits of members of the New Brunswick Fruit-growers' Association, and the remainder box exhibits entered by individuals and by the Department of Agriculture, has caused even many native New Brunswickers to open their eyes in astonishment at the resources of their own Province, and to wonder why long ago this Province had not taken her place among the chief orchard countries of the continent. It was an improvement, if possible, over a similar display of last year, where, by actual comparison with examples of modern box-packing from the famed Hood River, Oregon, and from British Columbia, Ontario and Nova Scotia, it was abundantly shown that, for skill in packing, as well as quality and appearance of fruit, New Brunswick apples were able to meet the world in competition for the very highest class of dessert apples, in growing which the Province excels.

The first that met the eye upon entering the broad floor of the rink was a sea of apples, and across the far end a wall of apples, all of the highest dessert quality, packed in standard boxes six tiers high, and extending across the end of the wide building, of which the major part was the dainty Fameuse, highest-priced of all apples; then McIntosh Red, Dudley (almost a native apple, since it originated in Maine only a few miles from our border), King of Tompkins, and others. There were commercial and plate exhibits, also, of almost every known variety of standard apples grown in America, but interest centered chiefly about the Fameuse, McIntosh and Dudley, which we not only can grow in highest perfection, but abundantly and cheaply in commercial quantities;

for be it known that it is not sufficient to be able to show specimens, but to grow them cheaply and in abundant crops. The greatest difficulty in the way of the earlier workers—the pioneers in the field of horticulture in this Province—has been that of finding late-maturing varieties, the so-called winter apples, having "keeping" qualities. In the earlier varieties, such as the New Brunswick-er (which, on account of certain strong resemblances in the fruit, has very naturally been confused by outsiders, and even experts, with a well-known Russian variety, the Duchess of Oldenburg), and Crimson Beauty (native hybrid with Fameuse and New Brunswicker as parents, produced by our great pioneer in horticulture, the late Francis P. Sharp), we have found already the ideal apple for their season, and they are both now well known in the markets of Eastern United States and Canada. There have assuredly been enough kinds of the approved late varieties to select from, or apparently so, but it has taken us, as all other orchard countries, years of tedious and at times discouraging experiment to realize the inevitable working of the fundamental laws of Nature. It was not only that the pioneers of our comparatively new country found peculiarities of climate, but of soil, which determines the suitability of varieties of fruit, than was formerly ever realized. The history of horticulture now shows this. Few of the most valuable European varieties proved good enough for America, so in the warmer orchard parts there came into existence as native seedlings of those same apples such famous American varieties as Northern Spy, Newtown Pippin, and Rhode Island Greening. But these varieties, in turn, proved not so suitable to the colder parts of United States and Canada. Now we in turn are discovering varieties in all ways as good, and as suitable to our conditions, and the proof of this is shown at last in the early varieties named, and in the Dudley, Fameuse and McIntosh, all of which are native of northern countries somewhat like our own.

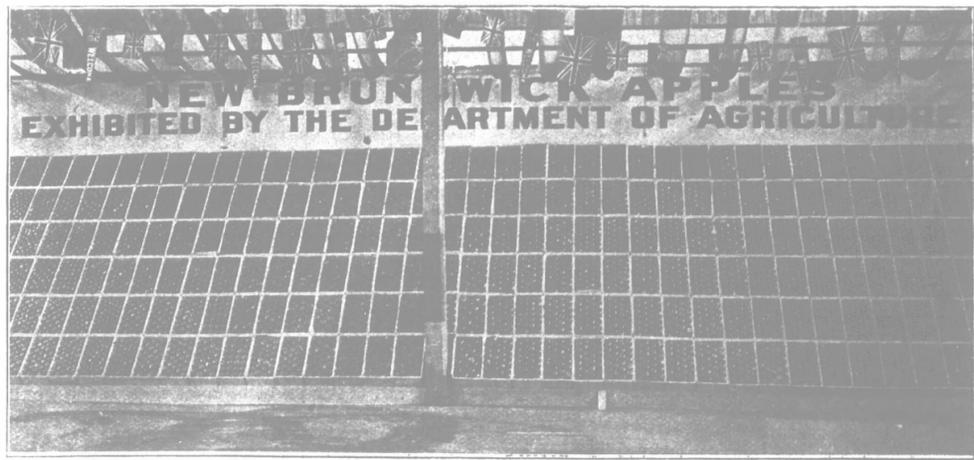
It takes a little time to build orchards and bring them into full bearing age. The lands which should support these orchards are co-extensive with the vast areas that are now or have been under a primeval growth of maple, yellow birch and beech, which means a capacity of millions of barrels annually, and yet the natural orchard lands of our Province hardly touched upon. No one of the great mining successes of the world, Johannesburg, the Treadwell, or Comstock, ever showed to the capitalist initial development work as basis for computing millions more convincingly than New Brunswick can now show; and now New Brunswick only needs a Treadwell or a John Hays Hammond to report, as it were, the mere facts of the case.

Another striking feature of the display was the preponderance of red apples, and it is now the red apple which, other things being equal, commands the market. There are red apples of the August and September season, red sweet apples, red winter apples. The famous Rhode Island Greening and Newtown Pippin are green and yellow; the Spy, indifferently colored. A visitor at the show exclaimed, "How is it you don't seem to be able to grow anything but red apples?" Even of red varieties, our apples grown here seem redder and handsomer in their glossy coats of carmine, and the secret of it may be this: Our clear northern sun. And, moreover, the same divine rays that paint the color make the quality beneath. The farther north, the finer the quality. Soil counts, too. The West raises the big apple; the East raises the one of superior flavor. The West must sit up and take notice. They may pack their fruit in most attractive manner, as they do and ought to do; they may advertise their produc-

tion as they are doing extensively and systematically in Eastern centers, but we must remind them that we, and we alone, in the East have the lime and oxide of iron, and less vegetable matter, in our apple soils, and these spell "quality." And they must also know that, for acreage production, their best, most advertised orchards do not surpass the record of orchards that are producing right now in New Brunswick. We have much to encourage us in the work so recently begun on a large scale. We are not so late to enter the race, after all. The famed State of Oregon, which only recently has begun to set the standard of the world for packing and marketing, began her work nearly as early as we. In 1860, apples in that State were the fourth most important agricultural product.

Space will not permit more than a brief reference to individual exhibits. J. C. Gilman & Son, who won the Knight Medal at the Colonial Fruits Show at London, two years ago, won the silver cup offered by the St. John Board of Trade for the best four boxes of dessert apples. Mr. Charters, of Westmoreland County, displayed forty standard varieties from one farm. The Provincial Horticulturist, Mr. Turney, under whose direction the show has been made such a success, showed the results of modern methods of orchard cultivation from test orchards under his direction the past season. One of our new companies, composed of enterprising local men, at Burton, in Sunbury County, had a creditable exhibit as regards both varieties and skillful packing, but beyond this is the confidence shown by them in the recent planting of commercial orchards on a very large scale. A special exhibit by Carleton County, the pioneer commercial apple section of the Province, must receive mention, for in this county commercial orcharding began on a considerable scale upwards of half a century ago, under direction of a man who can be counted nothing less than a remarkable genius, the late Francis P. Sharp, but who for many years worked practically alone, established orchards, originated several discoveries in the theory and practice of orcharding that are now becoming generally adopted in orchard countries. He and the well-known Peter McGideon, the discoverer of the Wealthy apple, were the first in America to scientifically hybridize the apple, a work now taken up by the Federal Government, with already satisfactory results. This county, mostly from orchards planted by Mr. Sharp or under his direction, and in accord with his methods, has been exporting as high as eighteen thousand barrels a year. This year the export is fourteen thousand barrels. Of this, three thousand barrels have gone out in form of canned apples, the superiority of which is shown by the fact that five carloads have gone on sale in British Columbia. This county, in order to deal with its local conditions and to improve the quality of the pack and market conditions generally, has organized a county fruit-growers' association.

In conclusion, credit must be given for the assistance rendered by the Provincial Department of Agriculture, which, in line with what is being done in other Provinces, is giving substantial aid, and it is only hoped that this support will not only be continued, but doubled and quadrupled. Tangible results have already begun to appear. Agents of large distributing centers in Great Britain and Cuba, drawn to this annual show, have taken back with them commercial exhibits, to the end of establishing permanent markets for our growers. Having markets on both sides, and with ready access to the sea, New Brunswick is in a fortunate position, and affords one of the best fields on the continent for orchard investment, whether on a small or large scale. TAPPAN ADNEY, Sec. Carleton County Fruit-growers' Ass'n.



A Fine Commercial Exhibit.

Box-packed fruit shown at the New Brunswick Fruit Show, St. John, N. B.