

the plants were showing nicely. From the time the plants became well established the difference between the plot which received the complete mixture and either of the other plots became more and more noticeable. The results at harvesting were as follows: unfertilized yield, 149½ bushels; complete fertilizers yielded, 225 bushels; incomplete fertilizers yielded, 161 bushels.

The incomplete fertilizer, costing \$7.56 per acre, increased the yield only eleven and one-half bushels, which if valued at 50 cents per bushel, would amount to \$5.75, thus showing a loss of \$1.81, while the complete mixture, costing \$12.24 per acre, increased the yield by seventy-five and one-half bushels, worth \$37.75, leaving a profit of \$25.51 after deducting the cost of the fertilizers. Not in quantity alone did the complete fertilizer demonstrate its superiority, the difference in the quality of the potatoes being quite as striking, for while the tubers on the two other plots did not show more than 60 per cent. free from scab, fully 90 per cent. of those grown under the balanced formula were entirely free. This was no doubt due to the greater vigor of the plants.

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Storing Vegetables.

Many a time and oft nice vegetables deteriorate through the winter on account of improper storing. It is claimed that plants, like animals, are subject to certain activities within themselves, and when the product of a plant is stored away, apparently dormant, there are still the processes of life going on within its cells. This results in a diminution of the quantity and sometimes of the quality of the product, consequently one should aim at conditions that will, so far as possible, curtail waste through activities of life, decomposition or evaporation. But what are these conditions? Generally speaking, it is a dry, dark, well-ventilated store room maintained at a temperature as near freezing as possible without reaching the fatal 32 degrees Fahrenheit. From 33 to 35 degrees is advocated for many kinds of vegetables but not for all, because there is no place more convenient to keep parsnips than right in the ground where they grew. In the spring they should be lifted before growth begins, else the preparation they make to produce foliage and seed that summer may render them indigestible and unwholesome.

Pitting is frequently more indulged in, because they may be taken out at anytime when the demand is keenest. Pitting is not to be despised as a means of keeping vegetables over winter, for the contact with the soil maintains a freshness about them that warm, ill-ventilated cellars cannot equal.

Some controversy has arisen as to how potatoes should be stored, whether in the light or in the dark. The consensus of opinion, however, favors absence of light for the tuber, and a temperature varying from 33 to 35 degrees Fahrenheit. Dryness and good ventilation are requisites to successful storage especially in a cellar, and in order to arrive at this, under difficult circumstances, some have been obliged to put a temporary slat floor in the bin, allowing from four to six inches of air space beneath it. When the depth of the pile exceeds five feet little flies might be erected here and there through the bin to carry off the impure or over-laden atmosphere around the potatoes. If the outlet be made of narrow pieces of boards it will be easy to construct it so the air can get into it from all sides, and by connecting it with the false floor a current of air will rise from beneath upwards, drawing with it the contaminated air about the tubers. If inside quarters are not always available they may be pitted by putting about fifty bushels in a heap, and covering it over with some straw and a little earth to keep them dry. A few tiles should be left sticking up through the top to allow ventilation, but as cold weather sets in and they cease to sweat a foot of soil may be thrown on them and furthermore covered on the outside with some coarse manure to hold the snow and keep out frost. Turnips are more often preserved in this way, but with a large quantity it is expedient to dig slightly into the ground, say to the depth of two or three feet, if the drainage is efficient. They, too, require ventilation at first, but less earth thrown upon them than in the case of potatoes will suffice. The protecting cover should be put on gradually as the severity of the cold increases. As, in the case of all kinds of vegetables, it only encourages waste to pit or store a diseased or affected product. Infection is extremely contagious in storage, and since there are so many diseases that affect crops it is time well spent in sorting over the crop or discarding altogether an infected tuber or root. Such things as potatoes bearing symptoms of dry rot should be fed to the stock,

for this is a means of utilizing the tuber and sparing a large part of the stored product from infection.

The cabbage crop often presents a problem. They are bulky and require attention to their condition while in storage. Generally speaking, they must be kept cold and moist, but never allowed to get warm or wet. They may be kept, in a small way, with the heads buried in sand in the cellar or even healed in by the roots. The surplus may also be pitted outside. The general practice is to remove the loose outside leaves, leave the stumps on and set them together, roots up, in a trench. They are then covered with from six inches to a foot of soil and mulch enough to prevent hard freezing. However, if they are frozen in the pit it will not injure them materially so long as they are allowed to thaw out in the ground.

Beets and carrots will usually keep well in a cold, dark cellar, but the latter crop should not be allowed to ripen too much, for they sprout badly when mature. To keep best carrots should be growing when harvested. Both these roots, however, are prone to wilt, and a covering of sand or loam is a nice preventative for this trouble. When the warm weather comes with approaching spring they will have to be watched, for the soil will encourage growth, and they may have to be removed from it.

Ontario Apples in the West.

An Alberta subscriber writes as follows re Ontario apples:

"It has been on my mind to speak about the apple industry in Ontario. Having lived in the city of Edmonton for two and one-half years I have noticed that the Ontario apple is not properly graded in shipping to the West. I bought a barrel of No. 1 Spies, and they were very inferior after the top was taken off, and the Snows were not fit to be seen. Now, what we want is quality. The British Columbia apple has good appearance, but the Ontario apple has the better flavor. Now, if you can impress upon the growers the great importance of getting a first-class sample, the West should be a good place to market them, for the Ontario apple has the better flavor, but growers will have to get busy to compare with B. C. apples in sample and appearance."

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

At the Union Stock-yards, West Toronto, on Monday, Nov. 9, receipts were 174 cars, comprising 3,077 cattle, 968 hogs, 1,986 sheep and lambs, 170 calves, and 400 horses. Trade slow, owing to the U. S. embargo on all cattle. In fact, trade in the forenoon was practically at a standstill for cattle. Heavy steers were quoted at \$7.75 to \$8; good steers and heifers, \$7.25 to \$7.50; medium, \$6.50 to \$6.75; common, \$6 to \$6.25; cows, \$3 to \$6.75; bulls, \$5 to \$6.75; feeders, \$5.75 to \$6.50; stockers, \$4.50 to \$5.50; milkers, \$50 to \$95; calves, \$4 to \$10.50. Sheep, \$2.50 to \$6; lambs, \$7.50 to \$8.12½. Hogs, \$7.15 f. o. b. cars; \$7.50 fed and watered, and \$7.75 weighed off cars.

REVIEW OF LAST WEEK'S MARKETS

The total receipts of live stock at the City and Union Stock-yards for the past week were:

	City.	Union.	Total.
Cattle	55	538	593
Hogs	905	8,178	9,083
Sheep	480	9,435	9,915
Calves	1,202	6,086	7,288
Horses	85	955	1,040
		874	874

The total receipts of live stock at the two markets for the corresponding week of 1913 were:

	City.	Union.	Total.
Cattle	61	782	843
Hogs	1,247	14,660	15,907
Sheep	151	7,792	7,943
Calves	984	10,569	11,553
Horses	53	1,142	1,195
		54	54

The combined receipts at the City and Union Stock-yards for the past week show a decrease of 250 carloads, 6,824 cattle, 4,265 sheep and lambs, and 155 calves, and an increase of 1,972 hogs and 820 horses, compared with the corresponding week of 1913.

Live-stock deliveries for the past week were heavy, especially for cattle. The quality of the cattle offered as fat was far from what it should be, considering

that for the past two months pastures, as a rule, have been good. Not more than four or five choice loads of cattle have been offered during the past week. The bulk of the cattle coming on the market was composed of canner cows and bologna bulls, for which there has been an excellent demand, at prices hitherto unknown on the Toronto markets since the American Civil War. These classes have sold better accordingly than any other. The highest price paid for choice heavy steers was \$8.75, bought for the New York market, to be shipped there alive. Another load sold at \$8.35, which is from 40c. to \$1 per cwt. higher than has been paid on this market for several weeks. The cause of this sudden rise was on account of the Buffalo and Chicago markets having been quarantined, and no cattle can be shipped alive from either of these markets.

Stockers and Feeders.—The market for stockers also has been affected, but adversely. Many stockers and feeders have been shipped to both Chicago and Buffalo, where they have been sold, to be distributed through many States of the Union. Prices have declined in the past two days from 75c. to \$1 per cwt. Choice steers sold at \$6 to \$6.25, and a few at \$6.50; good steers, \$5.75 to \$6; medium, \$5 to \$5.50; stockers, \$4 to \$4.75.

Milkers and Springers.—The demand for milkers and springers has been greater than the supply, which has caused the market to be strong all week. Prices ranged from \$60 to as high as \$115, for a very choice, high-grade Holstein springer, with promising milking qualities. The bulk of sales ranged between \$70 and \$95.

Veal Calves.—Receipts were light. Choice veal calves, new-milk fed, were in demand, as they always are, but all other classes were easier, as deliveries of fowl have been heavy, and prices quite reasonable. Choice veal calves, \$10 to \$11; good, \$9 to \$10; medium, \$8 to \$8.50; common, \$6.50 to \$7.50; inferior, \$3 to \$5.

Sheep and Lambs.—Receipts were lib-

eral the early part of last week, and prices remained firm, but at the latter end receipts were not as heavy, hence prices were firmer for the lambs and steady for the sheep. Sheep, ewes sold at \$5 to \$5.75; culls and rams, \$2.50 to \$4; choice ewe and wether lambs sold at \$7.60 to \$7.80, and \$8 was again paid for one extra choice lot of black-faces.

Hogs.—At the beginning of the week hogs were plentiful, upwards of 20,000 having arrived from the Northwest. At the latter end of the week prices became firmer, and sold at \$7.65 weighed off cars; \$7.40 fed and watered, and \$7 f. o. b. cars at country points.

TORONTO HORSE MARKET.

The horse market was dull all last week, there being few horses of any class sold. The only sales reported were for the British Army, prices for which were unchanged from those given the previous week.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, \$1.08 to \$1.10; Manitoba, No. 1 northern, new, \$1.23½, track, bay points; No. 2 northern, new, \$1.20½.

Oats.—Ontario, No. 2 white, new, 48c. to 50c., outside. Manitoba oats, No. 2, old, 61½c.; No. 3, 61c., lake ports.

Rye.—Outside, 84c. to 86c.

Peas.—No. 2, \$1.15 to \$1.25, outside.

Corn.—American, No. 2 yellow, 80c. to 82c., track, Toronto; Canadian corn, 82c., Toronto.

Barley.—For malting, 66c. to 69c., outside.

Buckwheat.—No. 2, 66c. to 68c., outside.

Rolls Oats.—Per bag of 90 lbs., \$2.95 to \$3.15.

Flour.—Manitoba flour—Prices at Toronto were: First patents, \$6.60; second patents, \$6.10; in cotton, 10c. more.

Ontario, 90-per-cent, winter-wheat patents, \$4.50 to \$4.70, Toronto freights.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto. No. 1, \$16 to \$16.50; No. 2, \$13 to \$14 per ton.

Straw.—Baled, car lots, track, Toronto, \$8.50 to \$9.

Brans.—Manitoba, \$23 to \$25, in bags, track, Toronto; shorts, \$26 to \$27; middlings, \$28 to \$30.

COUNTRY PRODUCE.

Butter.—Prices were about steady. Creamery pound rolls, 29c. to 31c.; creamery solids, 28c. to 29c.; separator dairy, 27c. to 28c.

Eggs.—New-laid eggs sold at 35c. by the case; cold-storage, 28c. to 29c.

Cheese.—New, large, 15c.; twins, 16c.

Honey.—Extracted, 11c. to 12c.; comb, \$2.50 to \$3 per dozen sections.

Beans.—Hand-picked, per bushel, \$3.50; primes, \$3.

Potatoes.—Per bag, 65c. for car lots of Canadians, track, Toronto; New Brunswick, 75c., track, Toronto.

Poultry.—Turkeys per lb., 14c.; spring ducks, 11c. to 13c.; hens, 7c. to 10c.; spring chickens, live weight, 10c. to 12c.; squabs, per dozen, \$4.

HIDES AND SKINS.

City hides, No. 1 inspected steers and cows, 14c.; No. 2, 13c.; city butcher hides, 14c. to 14½c.; country hides, cured, 15c. to 16½c.; green, 13c. to 14c.; lamb skins and pelts, 75c. to \$1; calf skins, 16c.; horse hair, per lb., 45c. to 50c.; horse hides, No. 1, \$3.50 to \$4.50; tal-low, No. 1, per lb., 5½c. to 7c. Wool, unwashed, coarse, 17½c.; wool, unwashed, fine, 20c.; wool, washed, coarse, 26c.; wool, washed, fine, 28c.

FRUITS AND VEGETABLES.

Apples, 10c. to 20c. per basket; bananas, \$1.25 to \$1.75 per bunch; citrons, 4c. to 5c. each; cranberries, \$6.50 to \$7 per barrel, and \$2.50 per box; grapes, Canadian, 15c. to 18c. per six-quart basket; grapefruit, Florida, \$2.75 to \$3.25 per case; limes, \$1.25 per hundred; lemons, \$4 to \$4.50 per case; oranges, Florida, \$2.75 to \$3; California, \$3 to \$3.65; pears, 25c. to 40c. for 11-quart basket; choice Duchess pears, 65c. per basket; quinces, 40c. to 50c. per 11-quart basket. Vegetables—Beets, 60c. per bag; beans, 40c. per basket; cab-bages, 25c. to 40c. per dozen; carrots, 60c. per bag; celery, Canadian, 15c. to