HARVESTING AND STORING POTATOES

Care in Harvesting and Storing Means Better Returns for This Year's Crop.

BY H. C. MOORE.

The more general adoption by the growers of good cultural practices, such as early planting, closer spacing, use of certified seed, etc., should result in better matured, brighter potatoes of excellent market quality. The advantages, however, of favorable weather and careful growing will be lost if the potatoes are carelessly handled when harvested and stored. The market wants bright, sound, well-graded potatoes. Poorly graded stock showing fork punctures, bruises and other blemishes resulting from careless harvesting and poor storing, causes Ontario growers enormous losses every year. The following suggestions should aid growers in handling the 1925 potato crop so it will market to the best advantage.

HARVESTING.

Delay digging operations until the vines are matured or until they are killed by frost. The tubers separate more easily from dead vines and are less apt to be injured than when the crop is harvested while the vines are still green. Digging operations should be started in sufficient time, however, so that the entire crop can be harvested and stored before freezing weather sets in. Usually the ideal harvesting season is only of a few days duration. This necessitates having sufficient equipment and labor available to shorten the work as much as possible. Every precaution should be taken to avoid field frosted potatoes. No other factor causes more worry and loss to growers, warehouse men and dealers than chilled or frosted potatoes.

As far as possible do the digging on cool clear days when the soil is comparatively dry. Wet soil sticks to the potatoes and often causes them to rot in storage.

Use care in handling the fork and digging machine to prevent injuring the potatoes. It is not uncommon to see many lots of potatoes showing fifty per cent. or more injury resulting from fork pricks, digger cuts and bruises. Such stock keeps poorly in storage, becomes dark colored and is not wanted on any market.

The details of harvesting should be closely supervised. A careless man with a fork can cause the grower a big loss in a short while. Keep the plow of the digging machine deep enough to avoid cutting the potatoes and to carry some soil over the conveyor rack. If the potatoes are bounced along on the bare conveyor chains, they will be bruised. Slow, steady driving of the digger is important in preventing serious bruising of the tubers.

The dug potatoes should be left exposed to the sun and air for a few hours until they are dry and their skins toughen. They should never be left exposed, however, to chilling temperatures. When picking up the potatoes, very effective grading can be done if the badly bruised, ill-shaped and cull stock is left on the ground to be picked up later. Where weather conditions and time permits mechanical sorters can be used in the field to good advantage. Special efforts should be made to eliminate as much as possible of the unmarketable potatoes from the stock that is carried to the storage cellar. This will make for a better looking lot of potatoes when it is later graded to comply with the standard grades.

Pickers should be cautioned against throwing the potatoes into the crates. Serious bruising results from this practice. If the potatoes are hauled to the storehouse in crates or bags instead of in bulk they will be less bruised. In many cases the hardest drubbing that the potato gets in the harvesting-storing operation is over the mechanical grader. The injury done them at this time can be materially lessened if the grader is of the continuous belt type instead of the shaker screen type. Padding the grader hopper with burlap and running the grader moderately slow will help save the skins and will make for brighter colored potatoes.

STORING.

Nothing but sound, dry potatoes relatively free from dirt should be placed in storage. Potatoes that are wet and dirty are likely to heat and rot. Growers and warehouse men should take pains to keep all lots of potatoes that are chilled or frosted out of the warehouse. Such stocks should be kept on the farm.

During the first few weeks of storage potatoes go through a sweating process. Much head and moisture is given off at this time. Windows and doors should be left open nights during mild weather so that the warm moist air can escape. The temperature of the storage cellar should be reduced to forty degrees 4. as quickly as possible.

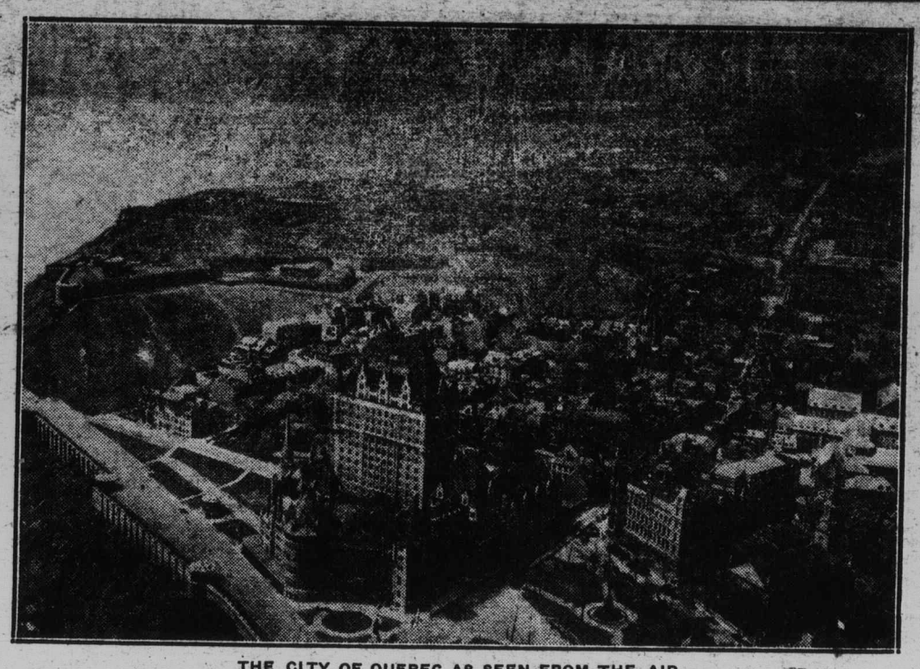
To keep the potatoes in a dormant condition and to prevent wilting and the development of molds and rots a uniform temperature of thirty-five to forty degrees F. should be maintained throughout the winter and spring. High storage temperatures cause a heavy shrinkage in the potatoes. If the temperature is much above forty degrees F. the tubers wilt and sprout during the late winter and spring months. High temperatures also favor the spread of molds and fungous diseases which make the skins of the tubers dark and in some cases causes rotting of the flesh. Temperature much below thirty-five degrees may cause the potatoes to have a sweet taste and darkened flesh. Chilling of the potatoes is apt to take place at temperatures of thirty-two degrees and lower. Store houses should be equipped with reliable thermometers. Many of them now in use in potato cellars are not accurate.

Potatoes in storage require fresh air to keep them in good condition. Lack of fresh air may cause blackening of the flesh (black heart) and surface breakdown (button rot). These conditions were quite common last winter and spring in poorly ventilated cellars and in large bins of potatoes that were not properly aerated.

Some of the better types of storage cellars receive their supply of fresh air through one or two twelve to twenty-four-inch concrete flues at the floor line. The intakes of the flues are generally placed from 50 to 100 feet from the cellar. The flues are placed below the frost line so that the temperature of the air is moderated by the time it reaches the cellar. The fresh air is carried the length of the cellar through ten eighteen-inch channels placed under the bins. The channels are covered with wooden slats spaced so that the air can rise through the bins. Ventilators are placed in the roof which allow the heated moist air to escape. All air flues and ventilators are provided with dampers and the entire ventilation system is under the control of the operator.

Large piles or bins of potatoes should be provided with ventilated division walls spaced at intervals of six or eight feet throughout the piles. These walls can be made of two by six-inch uprights with one by four-inch strips nailed on the edge. A one-inch space should be left between each strip. The ventilator wall should reach from the floor to well above the top of the pile. There should be sufficient air flues and ventilation walls throughout the pile so that no potatoes are farther than four feet from a supply of fresh air. This precaution will help eliminate blackheart, button rot and other forms of breakdown and will make for better quality seed and table stock.

The storage cellar should be kept as dark as possible so the quality of the potatoes will not be impaired. Light causes the potatoes to green and develop a bitter taste.



THE CITY OF QUEBEC AS SEEN FROM THE AIR

The above photo, taken by Fairchild Aerial Surveys Co., of Grand' Mere, Que., gives a splendid birdseye view of the Old City showing the Chateau Frontenac in the foreground, and Dufferin Terrace, the Citadel and the St. Lawrence River winding its way up to Montreal.

How to Open a Hive.

We never open a hive from the front. The natural home of bees is in a cave or hollow tree, and the idea of an intrusion from the rear seems to take them quite by surprise.

As soon as the cover is gently lifted up, a puff of smoke is blown into the hive, and the bees become completely demoralized and act as they do in any emergency—fill themselves with honey—so as to be ready if it comes to abandoning their home, to take enough with them to make a start in housekeeping elsewhere.

Now, when filled with honey a bee rarely stings, and this, combined with the panic, so breaks up the organized "spirit of the hive" that manipulations are performed with ease and comfort. —H. W. Sanders.

SIX MINUTES FOR BEAUTY'S SAKE

BY ROCHELL ROGERS.

The country woman who has not a great deal of time to give to the beautifying rites of cold cream and cosmetic aids but who, nevertheless, values a good complexion, will be glad to know of a six-minute beauty treatment many of her city sisters are successfully using at home.

Disfiguring blemishes, coarsened, rough or prematurely wrinkled skin—unless caused by depleted health—will yield to this daily care.

Besides the necessary six minutes, each night and morning, the requisites for this treatment are few—a cleansing cream, a tissue builder, an astringent lotion and a supply of very soft-textured cloths.

Those who know the how and why of complexion care warn against bathing the face with soap and water because of its tendency to roughen and irritate the skin. Instead, cleanse it with a solvent cream that will penetrate the pores and remove the dead oil and other clogging matter.

With the cleansing cream is used a tissue builder, rich in nourishing oils, and also an astringent lotion which, when used in conjunction with the two creams, will discourage wrinkles, shrink the pores, tighten the skin of a double chin and firm the muscles of the face and neck. An astringent that does not have a powder sediment is best, as it may be applied before powdering.

BEGINNING THE TREATMENT.

The beauty of any skin depends upon thorough cleansing before retiring. Powder and rouge, dust and grime, if left on, invite disfigurements and wrinkles.

Begin by pinning a protective towel over the hair. Open the mouth wide. Draw the lips over the teeth, and pull them as far over the edge as they will go. This position holds the skin and muscles firm and taut, and when the pressing motion this treatment calls for is used to apply the cream there is no possibility of breaking down the tissues or making lines in the face. So hold this position throughout the treatment.

Then dip the first two fingers of each hand into cleansing cream. It is not necessary to use a great deal of cream. Very little will do. Hold the fingers stiff, and with a firm, hard pressure—the firmer and harder the better—literally press the cream into the skin, always holding the face as directed.

Press—press! All over the neck and face, except over the eyelids where a very gentle patting is best. Press until the arms ache! The harder the pressure the more cream is absorbed—the greater the stimulation. It is active circulation that causes the pores to throw off the clogging matter dissolved by the cream.

Next, remove the cream, remembering—while holding the mouth open and lips drawn over the teeth—that removing is as important a process as applying the cream. Tissues must not be damaged. Lines must not be rubbed in.

NEVER USE HARSH TOWELS.

With the soft cloth provided for this purpose gently wipe over the eyes and around the nostrils. Lightly wipe the neck, chin, cheeks and forehead, always with an upward and outward stroke. Never dry the face with a harsh towel or bath towel.

Now, the cleansing cream removed, press the tissue builder into the face, which should be tingling by this time. Work this cream well into the skin and let the surplus remain on face and neck overnight. Unless wrinkles are well defined the astringent may be omitted at night.

In the morning—holding the face as directed—press in a very little of the tissue builder and apply the astringent over this. Wipe both off and tamp in a pure face powder. Don't rub; tamp or pat in with a large, clean soft puff. If rouge is needed put it on in a V shape. Begin at the temples and stroke toward the nose, then outward toward the jaw. Blend the edges deftly with the powder puff.

This completes the facial toilet and also protects the skin against the harmful effects of sun, wind and dust.

Butter and Cheese Output.

The manufacture of creamery butter in Canada in 1924 showed an increase over 1923 in every province excepting Prince Edward Island and New Brunswick, in Nova Scotia by 588,863 lbs., in Quebec by 6,381,860 lbs., in Ontario by 5,181,401 lbs., in Manitoba by 1,902,814 lbs., in Saskatchewan by 2,626,663 lbs., in Alberta by 4,420,035 lbs., and in British Columbia by 710,206 lbs. 1924 was a record year in Canada for the manufacture of dairy butter, being 184,290,908 lbs., over 21,000,000 lbs. in excess of the turnout in 1923. In the produce of factory cheese there was an increase in 1924 compared with 1923 of 234,000 lbs. in Prince Edward Island, of 116,911 lbs. in New Brunswick, of 4,662,823 lbs. in Ontario, of 364,257 lbs. in Manitoba, in Saskatchewan of 20,711 and in British Columbia of 27,453 lbs. Nova Scotia was practically stationary, but there was a decrease in Quebec and Alberta, both of which showed a good increase over the output in 1922.

The true purpose of education is to cherish and unfold the seed of immortality already sown within us; to develop, to their fullest extent, the capacities of every kind with which the God who made us has endowed us. —Mrs. Jameson.

Through a process developed by the department of agriculture, it is now a commercial possibility to keep sweet cider the year round. The process consists essentially of freezing the fresh apple juice, grinding this frozen material, and then, by means of a centrifugal process, separating the essential solids from the frozen water. Five gallons of cider are reduced by this process to one gallon of concentrate.

The Advantages of Co-Operative Marketing.

Convinced that co-operative marketing based on really sound principles is the best method of marketing poultry and poultry products, the Federal and Provincial Governments of Canada are giving encouragement to this feature of the poultry industry. In a bulletin on the co-operative marketing of poultry products, issued by the Dominion Live Stock Branch, the author enumerates the advantages of the co-operative method. Co-operative poultry and egg marketing associations have already achieved success in the different provinces. They have developed old markets and are finding new ones. They increase the income of the producers by cutting down expenses and obtaining higher prices for standard products. By securing capable and expert management, including a knowledge of the condition and needs of markets far and near, volume can be controlled, making it possible to cater to the exact requirements of different markets and to dispose of marketable goods to the very best advantage. These co-operative marketing organizations are also of great assistance in furthering the efforts of the authorities to standardize products and improve grading and packing methods. The bulletin, which may be obtained free from the Publications Branch, Dept. of Agriculture, Ottawa, tells in detail how to organize, finance and conduct these associations, and gives a great deal of general information on the marketing of poultry and eggs.

The ewe lambs should be supplied with a bone and muscle-making food. It is not advisable to make them fat.