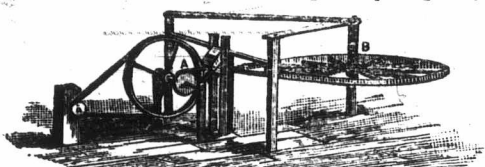


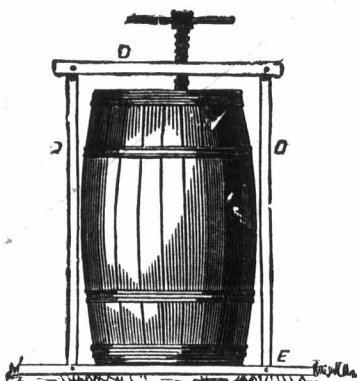
to a lever secured to the post below the power wheel. Upon the shaft, A, are placed two pulleys,



one larger than the other, and it receives its motion from the main power wheel attached to the post, B, by a belt A, that passes over the small pulley and communicates it to the ginning or threshing machine, by means of a belt passing over the larger pulley and a small pulley on the machine. The belt is guided from the power wheel to and over the small pulley on the shaft, A, by one horizontal and two vertical rollers, over and between which it passes, and the belt is kept tightened by a swinging belt tightener, which is provided where it comes in contact with the belt with a roller.

Barreling Apples.

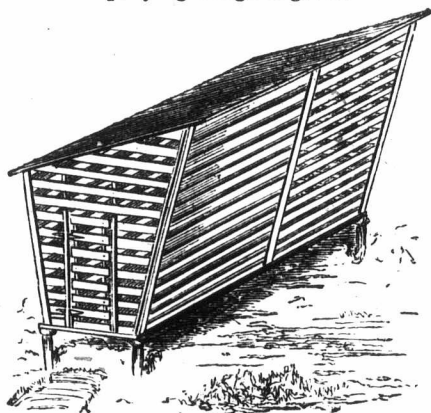
The common and most successful mode of gathering apples practised is, when apples are intended for fall markets, to carefully pick them from the tree by hand before they are injured by frosts; then they are emptied in a pile under a tree, and assorted and barreled up the same day, or assorted and placed in barrels immediately after gathering, the barrel being left unheaded for a day or more,



simply placing the head over them, keeping out dew and sunshine. There are various modes of barreling apples, and the one which we present to our readers is considered good. D. D. D. is a frame of sufficient dimensions to admit the barrel which stands upon the platform E. The pressing is performed by a screw, either iron or wooden, passing through the upper and horizontal part of frame

Cheap Corn Crib.

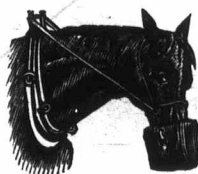
There are many farmers who follow a mixed husbandry, and who raise comparatively small quantities of corn, who cannot afford the expense of putting up very costly structures. For the benefit of such the accompanying design is given.



This is an excellent crib. The cells are 4x6 inches, framed; if only a small crib is needed, it will only be necessary to bore 2 inch holes at each corner and one intermediate, and insert sharp ended sticks 3 inches square, to which secure slats horizontally three-quarters of an inch apart. As this structure has but one door it is best to divide the room into two parts, the best or sound corn to be put in the rear compartment, and the poor corn in front where it may be first fed out.

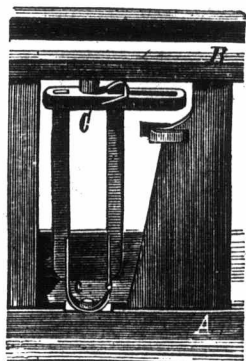
Feed Bag for Horses.

Mr. Frank Wheaton, of Brooklyn, E. D., N. Y., has patented an improvement in feed bags for horses, the object of which is to provide a device for suspending a feed bag from the head stall of a horse's harness, so made that the horse can reach the bottom of the bag without being chafed by the straps supporting the bag. The device is shown in the annexed drawing. The head stall, provided with a nose band, has a ring attached to each end, and a leather disk is also attached at the same place on the inner surface, the rings resting on the disk and the disk resting on the sides of the horse's head. A ring is fastened to each side of the feed bag, and to these rings the ends of a strap or a rope are attached, that passes from the outside to the inside through slots in the bags above the loop, and then passes through one of the rings on the end of the head stall, around the upper ends of the hames, through the loop of the other end of the head stall, and to the ring on the other side of the feed bag. The feed bag is thus suspended from the hames by the strap, and if the horse moves his head downward the bag will be drawn upward, and the horse can get to the bottom of the bag, and as soon as the horse raises its head the bag will descend, and the horse can take its nose out of the bag as horses like to do when feeding. In this device the strap is not bent at acute angles, but at every point at an obtuse angle, whereby the friction is materially diminished and the strap is not apt to crack or break. The disks also prevent chaffing the sides of the horse's head.



An Improved Cattle Stanchion.

Among recent inventions we find a useful improvement in cattle stanchions, by which both bars of the stanchions are free to move with every motion of the neck and shoulders of the animal, thus adding greatly to the ease and comfort of the animal and obviating altogether the injurious cramp-



ing and confinement incident to stanchions of ordinary construction. In the annexed cut, A is the lower, and B the upper beam of the stanchion frame. To and between these beams is pivoted the stanchion, which is formed of a movable stanchion bar that is hinged at its lower end to the curved plate C, and its upper end moves in a slot formed through the long arm of the cross

piece, C, and the stanchion bar that is secured at its lower end to the curved plate and its upper end to the short arm of the crosspiece. When the stanchion is open it is kept in proper position by a keeper placed on an upright board, and when the animal is in the stanchion, a hinged bale attached to the plate C, drops over the upper end of the bar, which is made to reach above the plate for that purpose.

Potatoes, when dug in an unripe state, may be at times watery and not fit to eat, but if spread as thinly as possible in a dry, airy place, they will in time become as mealy as if left to ripen in the ground.—[Mark Lane Express.]

Experienced fence builders and others who use wood in the rough for posts, ties, etc., unite in the opinion that timber cut in summer, while the bark will yet peel freely, is much more durable than that felled during winter. There is less of soluble sap in the trunk and limbs to absorb moisture, ferment, and induce decay.

"I must give THE FARMER'S ADVOCATE credit for being the best advertising medium I have tried, and I have advertised in the National Live Stock Journal and leading papers. I have received more enquiries from the little card in your paper than from all other advertising I have ever done."—JOHN DRYDEN, M. P. P., President of the R. A. Shorthorn Ass'n, Brooklyn, Ont.

Professor C. E. Goessman, at the Science Congress at Montreal, reported in reference to *peach yellows* that the disease at the Massachusetts Agricultural College was far worse in trees on poor light soil; where the soil was strong it obtained little hold. He thinks—and Professors Penhollow and Halstead agreed—that the fungi seen in the cells is a result of the disease, not a cause. It seems evident from the surroundings that there is some lack in the soil which gave rise to the enfeebled growth. Professor Maynard in 1878 commenced to treat the soil where the diseased trees were to a superphosphate, adding three or four pounds of chloride of potassium to each tree. Soon the trees improved and now they are in good health. Professor Penhollow and the writer both made chemical analyses of the sound and diseased wood. There was a lack of potash in the latter and an excess of starch in the cells. The cause of the disease seems to be improper assimilation, because of impoverished or improper soil.

Garden and Orchard.

Flowers and Plants at the Western Fair.

Notwithstanding the lateness of the season the display in this department was exceedingly fine, particularly of Dahlias, Gladiolus, Verbenas and bouquets of cut flowers, the portion of the vast building devoted to this exhibit being well filled with choice varieties of both greenhouse, outdoor plants and native wild flowers. This part of the Fair proved very attractive, and was extensively patronized. Indeed, this exhibit was well worthy of any first-class Horticultural Society, and illustrates our continual progress in the cultivation of the beautiful.

FRUIT AND VEGETABLES.

The show of apples was inferior to those of former years. This we may attribute to the unfavorable season. Pears were very good. There were some good specimens of plums, quinces, peaches, &c., but the lateness of the season prevented any great display of fruit. Vegetables in all classes were particularly fine. The enormous size and quality of cabbages and cauliflowers exhibited proved that there is nothing to prevent their successful cultivation in this country. Table corn, onions, squash, tomatoes, capsicums, and celery were all first-class. Potatoes in their different varieties were well represented, being large, clean and perfectly sound. Mangolds, Swedes and other field turnips, carrots and beets were shown of enormous size. Taken altogether it would be difficult to excel the display in this department. The dairy display was very large and highly commended, and great interest manifested in this department.

The duty of fumigating green-houses is such an unpleasant one that it is often neglected to the injury of the plants. A French horticulturist has made a discovery which will render it unnecessary to use smoke for the purpose. He finds that the vapour from boiling tobacco juice is as efficacious as are the fumes from the burning weed. The method adopted is simply to mix a small quantity of juice in water and evaporate the whole. The vapour, it is said, kills all the insects in the house. Could not the same plan be adopted against house-flies and mosquitoes? Its recommendation would be its cheapness, for the juice could be expressed from the refuse tobacco which is now thrown away at the factories.

RABBITS IN ORCHARDS.—A correspondent of the *Gardener's Monthly* says:—A few years ago I was greatly annoyed with rabbits barking my young apple trees. To prevent their depredations I made ropes of hay. These I wound around the trunk of the trees from the roots to the first limbs, in the fall. I left them on all the following summer, and when I removed them in the fall I found the bark fresh and healthy and free from blotches. I repeated the operation for some years and in consequence have healthy, vigorous trees, free from fungus and all disease, and yielding an abundance of fruit. The process is not only good for protecting the trees from rabbits, but also to protect the bark from the cold winds of winter, and the hot sun in summer.