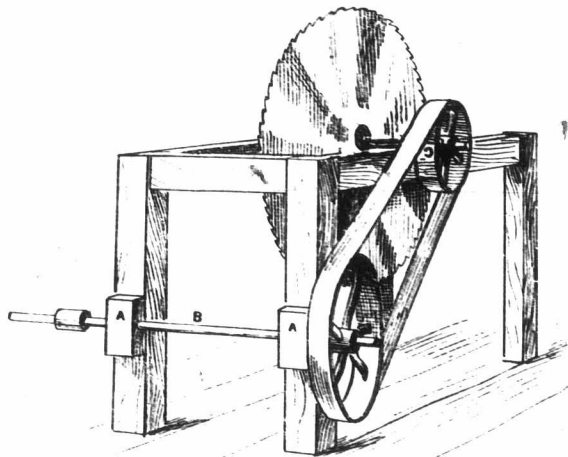


THE HELPING HAND.

Improved Jack.

J. G. COWIE, Haldimand, Co.:—"To increase the speed of cutting-box or circular saw:—

"Bolt boxings on to the end posts of cutting-box or circular saw, about 2 feet from the floor, (A A); hard maple blocks, 4 x 4 x 8 in., with hole bored in them the size of shaft, and oil hole, answer the purpose quite well. Get a piece of tumbling-rod or piece of steel shaft (B) cut 2 feet longer than width of cutting-box, and have each end squared so that the tumbling-rod knuckle will fasten to either end. Get an old threshing machine pulley from 2 to 2½ feet in diameter and fasten with set-screw or wedge on shaft (B), as close to boxing

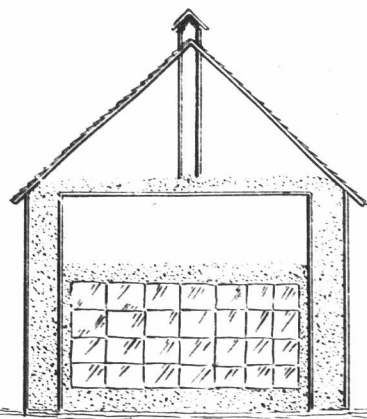


as it will run. If there is not already a pulley on main shaft (C), another old one may be procured, from 8 to 12 inches in diameter, so as to have the large pulley 2½ to 3 times the diameter of small one. Connect with a piece of rubber belting tightly laced. Connect tumbling-rods with either end of shaft (B), and you can set your cutting-box on the ground or barn floor and cut all day without so much as a nail or brace to keep it in position.

"We placed this device upon our cutting-box two years ago, at a cost of \$2.00, besides our own work, and find it far superior to any jack or extra gearing I have ever seen."

An Ice House on the Farm.

T. P. HART, Oxford Co.:—"A very convenient and almost necessary building on a farm nowadays is an ice house. For keeping milk over Sunday for the cheese factory or cooling the 'night's' milk in very warm weather, hang a pail containing a piece of ice in the can, or place the can in a large tub with pieces of ice around it. Where butter is made in the warm weather ice is also used for raising the cream, in deep-setting cans, and for keeping the butter firm for working. In marketing, firmness helps the price. As a luxury, ice may be used in the manufacture of cooling drinks, lemonade, and ice cream.

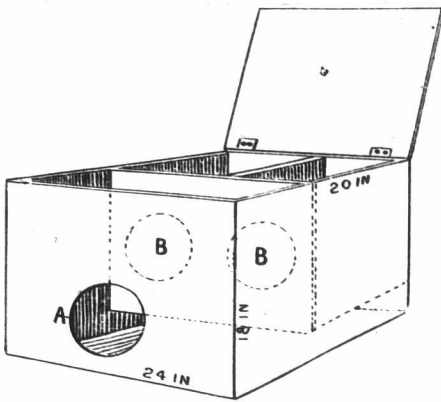


"In choosing a situation, the north side of a larger building, or under the shade of trees, is desirable. Attention must also be paid to drainage, as there will always be more or less waste water during the summer, which must not be allowed to remain near the ice. For the foundation, it is not necessary or advisable to dig below the surface of the ground; put about a foot of sawdust over the bottom. The frame is made of 2 x 4-inch scantling, twelve or fourteen feet square on the outside, and at least eight feet high. It is best to put on a good, shingled roof, which helps to keep out the heat as well as the rain. Board it up inside and out with any rough lumber, also put a ceiling in, which is covered with sawdust. The first winter the writer only left a space of four inches between the inside and outside walls, but the next year this was changed to sixteen inches, and well packed, with much better results. The thicker wall keeps the ice without much sawdust between the inside wall and the ice itself, and saves the trouble of shovelling over so much of the packing material near the end of the season. A small ventilator is put in through the ceiling and roof. Along in January or February we go to a neighboring pond, cut a hole with an axe, and proceed to saw into cakes about eighteen inches square, which is found to be the most convenient size. The cutting is done with an ordinary

cross-cut saw with a little more set than is used for sawing wood. Care should be taken to have all the squares as near one size as possible, and the sides perpendicular. Pack them together as closely as possible, filling in the small spaces with broken ice. Leave a space of three or four inches between the ice and the inside wall, to be filled in with the sawdust; also cover over the top layer, six or eight inches deep, with the same material. Ice tongs are not expensive, and are used in removing the ice from the water, but a board with a cleat across one end, thrust under the cake till the cleat catches the lower edge, may be used in place of the tongs. Examine the ice frequently during the summer, and fill in all spaces caused by melting. The cut shows a section of the ice house after it is filled."

Nest Box to Avoid Egg-Eating.

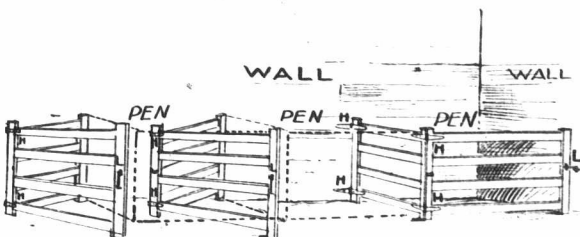
W. C. HUFF, Prince Edward Co.:—"The egg-eating habit, when once acquired, is difficult to break. The cause may be attributed to mismanagement in feeding, along with idleness at this season. Try this nest before they commence. Make a box 24 inches long, 20 inches wide, and 18 inches high; 'A' is an 8-inch entrance to passage before the nests; 'B B' is where the hen enters the nest; 'C' is lid at top for removing eggs. Make two ends and



a back for the box; then take a 10-inch piece that will go inside of box, nail it to ends and back, 5 inches from floor; this is the bottom for the nests. Next take a piece that will make a partition to separate nests; the next, a board for front; make two holes in 8 inches from lower edge; put this up for front of nests, also to enclose 5 inches space under the nest-shelf; now put on front of the box with one entrance. The passage between the outside front and inside front makes it much darker. Complete it by putting on top."

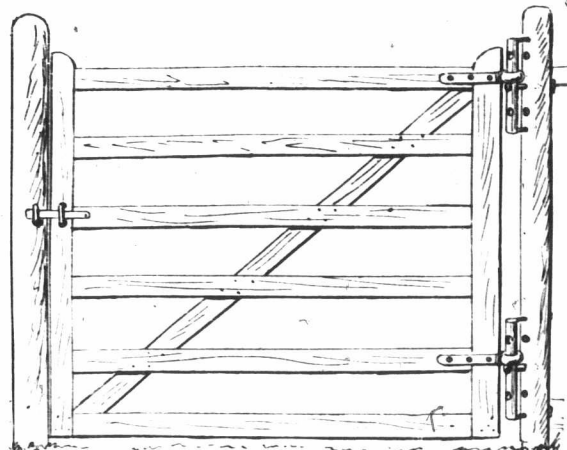
[NOTE.—Our artist has shown the whole top of box to be a lid, so as to more clearly show the construction of the inside. A narrow lid at the back is all that is necessary for the removal of the eggs.—EDITOR.]

Adjustable Pens.



WM. J. WILLIAMS, Ont. Co.:—"The above cut represents pens for sheep at lambing time, or cows at calving time. They are made of lumber, in the shape of common gates; it takes two of these gates, four hinges, one hook and two staples, to make one pen. In Fig. 'H H' are hinges and 'L L' are hooks; the cut shows how they work. They may be made behind where cows or horses stand if there is room; they fold back out of the way when not in use, and may be made any size desired."

A Gate for Snowy Countries.



J. J. MCGUIRE, Allumette Island, Que.:—"I enclose you an illustration of a handy farm-yard gate for snowy districts. It can be raised up from the snow by lifting and removing the pin to the highest hole in the hinge. These holes should be continuous into the post a few inches, so that the gate may have a solid bearing upon the bolt."

APIARY.

Ontario Bee-Keepers' Convention.

The annual meeting of the Ontario Bee-keepers' Association convened in Brantford on January 15th, 16th and 17th. The almost entire absence of a honey crop last year prevented a large attendance, and it was noticeable that some of those present were not in the best of humor, which condition had an undesirable effect upon the harmony of the sessions—more sweetness needed. Notwithstanding the fact that a programme was prepared that might have brought out much valuable discussion, the time was so much occupied with personal differences that not only was the time lost but peaceable members became so much disgusted and annoyed with the proceedings that almost all the utility was taken out of the convention. It is a matter for regret that expert bee-keeping delegates should gather together from the very extremities of the Province and not have an opportunity of teaching and learning lessons from each other's experiences, to be disseminated through the press, so that smaller bee-keepers may glean points whereby they may improve their methods. We would not be understood that the majority of the members who attend this convention from year to year are unreasonable cranks, but when a few men are allowed to break the peace of the whole gathering, the directors and other officers are more to blame than perhaps they allow themselves to believe. We have attended the last two annual meetings, and have come to the conclusion that unless the directors and officers combine against such dissensions as have characterized these two conventions, the money expended in holding such would be more productive if devoted to some better directed enterprise.

The President's Address dealt with the salient features of the industry. It was recommended that bee-keepers who get foul brood co-operate with the Inspector as carefully as possible in stamping it out. It gave him pleasure to realize that Europeans are seeking Canadian honey; he therefore felt the necessity of having the Pure Honey Bill passed, so that the reputation of Canadian honey may arrive at the position which will make it desirable to honey-consuming markets. The President also recommended that packages be stamped, on the same principle as the branding of Canadian cheese.

Foul Brood.—The report of the Foul Brood Inspector, Wm. McEvoy, showed that eighty-five bee yards were visited, thirty-two of which were affected with the disease. Owing to the severe frost in May, followed by the continued drouth, the brood of many colonies died from starvation, which in many cases was taken for disease, and therefore a great demand was made for inspection, which fact indicates that bee-keepers are becoming more anxious for visits from the inspector than heretofore. A few years ago much opposition was met from bee-keepers who now welcome inspection, knowing that the desire is to cure and not to kill, except when a cure can not be otherwise obtained.

Among the communications read was a letter from the Rev. W. F. Clark, Guelph, in which the Foul Brood Inspector was strongly condemned for having destroyed a number of his colonies by fire. To this, Mr. McEvoy explained that he had spent a great deal of time endeavoring to have a cure effected, but ultimately found that destruction by fire was the only wise method to pursue. After hearing both sides of the case, the convention endorsed the Inspector's actions in this as in all other cases. A vote of thanks was then tendered to him for his good work, and a resolution was passed to the effect that the Association have confidence in their Inspector, and that they believe his method of cure is the best known.

The Pure Honey Bill.—Mr. S. T. Pettit reported on the Pure Honey Bill, which has been introduced into the House of Commons, but has not as yet passed all the readings. The purpose of the Bill is to prevent the production of sugar honey, and ultimately to have the same effect on the honey industry of Canada as the law against "filled" cheese has on the cheese reputation and business. Mr. Pettit was one of a committee last year to go to Ottawa in its interests, and, although he did not succeed in getting the Bill through, feels convinced that all that is necessary for its passage is continued effort by the Association for a short time longer. One very good argument in favor of such a Bill was the presence of a sample of adulterated honey brought to the meeting by one of the directors, who obtained it from a grocery store. It was in a glass vessel sealed with a paper stamped "Canadian honey." The stuff was mildly sweet, light in color, and thin. While it was not unpleasant to taste, its after effects were of such a character as to disgust a consumer with honey as an article of food. A sample of this so-called "Canadian honey" was recently subjected to the Dominion Analyst for analysis, when it was found to contain too much glucose syrup and more than the average per cent. of water. It was, therefore, evident that it had been adulterated with these substances. The only opposition offered to further pressing the passage of the Bill was by one member, who has always claimed that the Adulterated Foods Act already covers the necessary ground. He therefore considers it unwise to expend any more money over it. It was, however, claimed by several intelligent members that the presence of such stuff as was proved to be upon the market showed that the passage of such an