HORTICULTURE

Foreign Demand for American Apples.

In a recent address William A. Taylor of Washington said: "The reasons for the increased demand for American apples in foreign markets are varied. One of the most important of these is, unquestionably, the rapid growth of the large cities of Europe in recent years and the relative stagnation of fruit culture in many portions of that continent. Better transportation facilities in this country and on the ocean, at lower cost, have made possible the landing of American fruit in certain European seaports at less cost and in better condition than that shipped only a short distance from their home orchards. The development of refrigerated storage in the United States has greatly steadied the export apple trade by prolonging the shipping season until Australasian fruit of the new crop comes forward in considerable quantities.

"Five years ago it was practically impossible for a shipper with less than five carloads of fruit (the approximate capacity of most of the refrigerated compartments) to secure space for his shipment, while at the present time space to several ports can be had for single carloads at almost any time during the shipping season by arranging in advance.

"Other causes of the increased demand are undoubtedly the gradual improvement in methods of packing and handling the fruit of our commercial orchards and a gradual approach toward standard grades and standard sizes of barrels and boxes which is in progress and along which line there is still room for great improvement.

"With all the gratifying features of the apple export trade, there are still some difficulties to be overcome if the export outlet is to be sufficiently enlarged to carry the prospective surplus fruit from the 200,000,000 apple trees now in our orchards. First among these is better handling and packing of the fruit. While there has been marked improvement in this respect in recent years, there is still need for emphasis on this point. Regardless of trade or quality, apples destined for export shipment must be snugly and tightly packed."

Balanced Rations.

So far as possible, the fowls should have balanced rations, and it is probably best to balance the rations at each meal. Man has come instinctively to prefer balanced rations. Long before he understood the reason for it, man made up each meal of different kinds of food. He always wants the carbohydrate potato with his protein lean meat. If he eats a meal of potatoes alone he feels dissatisfied, and if he is compelled to put up with meat alone he feels that he has not had the kind of food needed. He does not eat his potatoes at one meal and his meat at another. Nature seems to point to the necessity for giving the different components of a balanced ration at one meal.

The Flat-Beak Beetle.

At a meeting of fruit growers, a member said: "Another insect that works on the trunk and branches of trees, especially the plum, is the flat-beak beetle. It bores little pinholes through the back of the large branches, sometimes getting down into the trunk, and lays its eggs in those holes, where the larvæ feed on the inner bark, sometimes girdling the inner bark. When that gets too bad, the best remedy is to cut the tree down and burn it, but that can be largely kept out by keeping the tree in a healthy condition, for they seem almost always to attack trees that have been otherwise diseased or injured previously."

DAIRY NOTES

Dairy School Attendance.

Reports from Wisconsin say that the dairy school this year is crowded, there being 125 students present. This number is twenty-five more than the school has facilities for instructing with ease. When the present school was built it was felt that the capacity would be great enough for a long time to come. The attendance shows the interest Wisconsin farmers are taking in scientific matters relating to dairying. Among the students this year are some Swiss buttermakers from a part of Wisconsin where cheese of foreign name are being made. From other parts of the country come reports of good attendance in the dairy schools. This is an encouraging feature of educational advance. Probably no phase of farm life more needs the help of science than the dairy, as it is the part of farm work that touches manufacture.

Every state of the Union should have a dairy school, for in every state of the Union dairy products are becoming important parts of the farm output. Dairy conventions stimulate interest, but seldom get down to the foundations of matters in their papers and discussions, and, if they do, the people that hear them do not understand what is said. But in the case of dairy schools the students begin at the foundation and acquaint themselves with the obscure things that need to be brought out to the light.

Many of our farmers could well afford to send their sons to take a course in the dairy schools of their respective states. If the capacities are not now great enough they could soon be made so.

Sterilized Water for Washing Dairy Dishes.

Dairy utensils should be washed in water that is sterile as to last application. Of course, we do not recommend that hot water be used before the dishes have had the milk rinsed out of them. But water that is sterile has been found absolutely necessary in the washing of churns and milk holding utensils, where diseases have become prevalent or forms of bacterial life that cause taints and stringiness in milk. Recently in a magazine appeared an article relative to the sterilization of water by the application of copper sulphate at the rate of one part of copper sulphate to one million parts of water. This, it is said, will kill germs in water. As copper sulphate is a deadly poison, we do not advise our readers to use it as described. The use of the proportion given would not endanger life, but novices cannot be depended on to confine themselves to prescribed rules. The chemists will doubtless provide us with full information in due time. Meanwhile, the boiling of water is the surest way of getting water that is germ proof, and that is so simple a process that we have no hesitancy in recommending it. Dishes thoroughly heated by means of boiling water will not carry lactic acid ferments from milking to milking and thus hasten souring of the milk.

A Check on the Milk Buyer.

When a producer of milk for use in a creamery or cheese factory has a suspicion that he is not receiving fair treatment at the hands of the buyer, as to the test, the proper thing to do is to purchase a tester and test the cream and milk before they are sent from the farm. This may vindicate the test of the buyer or may show him to be dealing dishonestly, but in either case it will bring conviction to the mind of the milk producer. There is nothing more disquieting than working in the dark, and nothing more satisfying than knowing just how things stand. A milk tester can be purchased for about $5.

POULTRY

Wisconsin Inspection of Cheese Factories.

Professor Henry and other leaders in Wisconsin dairy thought are advocating greater efforts in the improving of the output of cheese. We believe it was Professor Emery of the Wisconsin State Dairy and Food Commission who last year advocated the placing of a tax on each cheese factory in the form of a license, thereby enabling the state to spend more money in the way of cheese factory inspection. Professor Henry advocates the placing of a tax sufficient to enable the state to raise by the licenses $30,000 a year. He says that forty inspectors should be put to work at once and that these would not find the work light. Wisconsin has done more in the way of inspecting cheese factories than any other American state, and it is largely due to this that the cheese output of the state has remained good and has increased in price. It is to be hoped that Wisconsin will make the venture and thus blaze the way for the other states.

Warm Drinking Water in Winter.

In much of the weather we have in winter the water freezes very quickly if set out at the temperature at which it is drawn from the well. To permit the fowls to have all the water they desire, it will be necessary to warm the water to about 100 degrees. It will take some time for the temperature of this to fall to 32 degrees. This given twice a day will keep them supplied with the liquid with which to make eggs and flesh. It must be remembered that much of the eggs, as much of the flesh of fowls, is water and that all food must be greatly diluted before it can be used by the system of the fowl. The lack of sufficient water always results in a check to the digestive operations. The coldness of the water also acts as a temporary check. The more water the fowls drink the better it is for them, and the more pounds of flesh and more dozens of eggs they are likely to produce.

The Ground Bone Ration.

We have often referred to the use of ground bone for poultry feed, and will again call attention to the matter. Fresh bones are most valuable, as they have on them a large amount of fresh meat. Bones also supply a large amount of phosphorus, which is present in bones to a larger extent than in most other kinds of food given fowls. It is to be doubted if there is any other kind of feed that has received a more universal endorsement than has fresh cut or ground bone; yet one is surprised as he goes from farm to farm to find how few farmers comparatively have a bone grinder or bone cutter. It is more surprising to find that the fowls generally receive no ground bone in their ration, even the purchased sort. If there were as many bone grinders as there are farms on which poultry are kept, it would be money in the pockets of American farmers.

Butchering the Trees.

Many an orchard is left unpruned for years and then a man goes in with saw and ax and butchers the trees. By this is meant that the large limbs are sawed off here and there, and to such an extent that the trees present the appearance mostly of having been chopped rather than trimmed. The backset that some orchard trees get from such treatment is so great that some die, while others always remain unsightly and ill proportioned. Trees of all kinds should be trimmed a little each year and when that is done carefully no sign of butchering is to be seen.

Every man is his own happiness maker.—Cincinnati Commercial.

LIVE STOCK

Do Not Forget Rape.

This coming season a small field of rape should be put in if the farmer keeps almost any kind of live stock, especially sheep or hogs. This plant is becoming very popular in the parts of the country where it has been longest grown. It is scientifically known as brassica napus, and is of the same family as cabbage and turnip. It will grow wherever potatoes, corn, turnips and cabbage will grow. It needs especially a soil rich in the mineral elements and in humus.

It is a very good crop to rotate with clover, cow peas, soy beans, white beans, peas and the leguminous plants generally, as it takes from the soil very different elements from those taken by the plants named. It is above all a soiling crop, and when treated as such will yield from ten to twenty tons per acre. It is, however, used also as pasturage, but when so used must be carefully handled or the stock will eat it down too close to the ground to permit it to give the largest yield per acre.

About three pounds of seed is required per acre, and the seed is drilled in, the rows being 24 or 30 inches apart. Cultivation should be given as soon as the plants appear above the ground, to keep down the weeds and the cultivation should be repeated often. The keeping down of the weeds is the important thing in the caring for the rape, but when it has obtained a good development its spreading leaves will shade the ground and the weeds will thenceforth make very little growth.

If the rains are good and weather warm, the rape will make a good growth in six weeks and by that time may be cut and fed to some extent. If it is to be pastured the stock may be turned onto it at that time. If it is cut down to the ground, new seed must be sown at once, and this process may be continued till late summer. The crop will keep on growing till the heavy frosts kill it in the late fall. It will stand a good deal of frost, as will turnips, and now and then roots and plants will live over winter. If the plant is pastured but lightly the hogs or sheep will eat but the tops and the sides of the leaves, leaving the stalks and some of the mid-veins. These at once send out new verdure and will continue to renew themselves all through the season.

Oil Meal in the Beef Ration.

At the Nebraska Experiment Station a test was made with two-year-old steers to determine whether or not oil meal added to a corn ration with grass pasture would lessen the cost of producing grains.

One lot was fed daily an average of 17.8 pounds of corn meal per steer, while another lot was fed the same weight of grain, consisting of 90 per cent corn meal and 10 per cent oil meal. Each lot was fed on a mixed pasture consisting of blue grass, brome grass, prairie grass, meadow fescue and a little alfalfa. During the entire period from April 21st to November 18th those on corn without oil meal made an average daily gain of 1.65 pounds each, while those fed 90 per cent corn and 10 per cent oil meal gained 2.02 pounds per day. Without oil meal, 10.9 pounds of grain were required for each pound of gain, while with oil meal but 8.8 pounds of grain were required for one pound of increase in weight. With corn worth 33 cents per bushel, oil meal $25 per ton, and grass $3 per acre, the cost of producing gains was 13 per cent greater without oil meal than with it. The oil meal in this experiment proved to be worth $44 per ton. Had it cost more than that figure, nothing would have been gained by feeding it.