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comb; it may scratch or irritate the skin. If you can draw the comb over the back of your hand without causing annoyance, it will not harm the cow. A little trimming may be necessary; long hairs around the head and udder may be clipped off to advantage. Then, the horns may require attention. The roughness can be rasped or sandpapered off and a little polishing done. This may not increase the value of the animal, but it improves the appearance and shows that the exhibitor has done his best to make his stock attractive, and that

counts for a good deal.

Too many animals brought into the show-ring act as if they were being led for the first time. There is little excuse for this as it does not take long to halter-break an animal, especially when it is young. When the stock is continually moving about it does not give the judge an opportunity to size it up as he could if it were standing in position; consequently, failure to train the animal to stand properly is oftentimes responsible for losing the coveted ribbons. The man who knows his animal can train it to stand so as to strengthen some weak point. If the animal is worth showing it is worth while taking pains to prepare it for the show. Failure to fit and train the animals applies more to exhibitors at local fairs than at the large exhibitions. The idea seems to be prevalent that as competition is not very strong at the township fair, it is not worth while going to any bother in fitting the stock. If the prizes are won it is practically clear gain, if not, there is little loss. This may be true but it is not the right spirit to carry into the show-ring. What impression does it leave with young men if unfitted animals are able to secure prizes owing to lack of competition? What kind of an ideal does it set up in the neighborhood? If exhibiting your stock at the local fair, fit and train it the same as you would if going into exceptionally strong competition.

Feeding the Young Bull.

EDITOR "THE FARMER'S ADVOCATE":

I read with interest your advice, in a recent article, on raising calves, especially the heifer calves which one intends keeping for cows. I always save the heifer calves from cows that are good milkers. I like the parents to have age, as they seem to throw stronger and better-developed stock. I have a young pure-bred bull which I recently purchased. He sucked a cow for seven months and was then weaned. I keep him in a box stall during the day, but towards night I turn him in a small field with the other calves. He is fed rolled oats three times a day; a little barley is mixed with it, about three parts of a gallon at a feed. The grass in the field has become a little short, so I have quit turning him out at night and cut grass for him instead. He is watered twice a day. Should he thrive well under this treatment? He is nine months old now and in good condition. My object is to keep him growing.

The system of feeding outlined should give very good results. However, we would prefer allowing the calf to run in the field at night for exercise, but give him all the grass or clover he will eat in the stable. Clover or alfalfa is preferable to timothy for young stock.

During the month of June thirty-five Holstein cows and heifers were accepted for entry in the Record of Merit. Bell Model Pietje was first in the mature class with a record of 598.3 pounds of milk and 28.71 pounds of butter-fat in seven days. The junior four-year-old class was led by Korndyke Segis Hartog with a milk yield of 586.2 pounds and 24.7 pounds of butter-fat. Miss Mercena of Alluvialdale was first in the senior three-year-old class. In seven days she gave 525.4 pounds of milk which yielded 16.37 pounds of butter-fat. In the junior three-year-old class Pietje Geiske Walker was first, while Pontiac Cornelia Pietje was first in the senior two-year-old class. Avondale Pet was the highest junior two-year-old with a record of 17.61 pounds of butter-fat.

During the month of June certificates were issued for twenty-three Holstein cows and heifers which had qualified in the yearly Record of Performance test. Flora De Kol Maid was first in the aged class; her milk yield being 17,005 pounds, which yielded 532 pounds of fat. Bonheur Queen Mercena made an excellent record in the four-year-old class. Her 17,587 pounds of milk yielded 671 pounds of fat. There were only three in the three-year-old class, with Cornucopia Sylvia Beets leading, with a record of 13,558 pounds of milk. In the two-year-old class Madoline Dora De Kol was first. She gave 11,748 pounds of milk and 458 pounds of fat. Her milk yield was exceeded by three other cows but she had a considerable lead in batter-fat.

POULTRY.

Poultry Feed Prices.

Editor "The Farmer's Advocate":

I just read in your paper, under Poultry: "Cheaper Poultry Feed". When seeing this headline I felt delighted but when reading the article over I was disappointed. I think every farmer interested in poultry or other live stock has tried broken wheat, screenings, etc., but the prices were so high as compared with good wheat or grain that in fact good grain was cheaper in feeding value than the screenings. I do not think that any mill or elevator could, or better would, be willing to separate cracked and shrunken wheat and wild buck-

wheat from the large percentage of real useless weeds

The poultrymen of Canada would highly appreciate it if the Department of Agriculture could arrange that good screenings would be sold at right prices. A large quantity of wheat could be saved, but none will feed high-priced screenings full of all kinds of useless seeds. Lincoln Co., Ont. Otto Herold.

Egg Market Stronger.

For the week ending July 17 eggs and poultry markets report of the Dominion Department of Agriculture are to the effect that the egg market is gradually gaining strength, due to a certain extent to the falling off in receipts, combined with an improvement in the export situation. There is a firm tone to all the larger markets and at local points an advance of from six to seven cents has been reported during the past ten days. Prices in Montreal and vicinity have been slower to respond than they have in Western Ontario, due largely to the arrival of several cars of Western eggs. With the favorable turn of the export market, and the shortage of supplies, it is reported that some country shippers have received offers as high as 36 cents f. o. b. shipping point for candled stock, while 34 cents is becoming general over Western Ontario. Buyers are placing a premium on quality and it is to the advantage of the producer to take very precaution to safeguard and conserve the quality of the eggs he places on the market. Eggs have advanced in price from one to one and one-half cents in Manitoba. one cent in Saskatchewan and from two to three cents in Alberta. The markets in the United States continue firm, with receipts, particularly of the higher grades, showing a distinct falling off.

Receipts of poultry, particularly fowls, continue light for this season of the year. This may be due to the favorable reaction in egg prices or to the fact that poultrymen and farmers are exceptionally busy at the present time. Later in the season there is usually a rush to market the old birds which results in a sharp decline in price. Those who have poultry for sale might find it to their advantage to market it before the movement of poultry becomes general. The poultry situation in the United States is reported to be in a very depressed condition at present. Government reports indicate that stocks on hand are large.

Current storage poultry prices wholesale for the week mentioned were milk-fed broilers, 30 cents; from the range, 22 cents; milk-fed chickens, 27 to 32 cents, and on the range, 22 to 25 cents. Light fowl was from 17 to 20 cents, and heavy fowl, 22 to 23 cents. Old ducks,

20 cents; young ducks, 24 cents. Geese, 12½ cents and turkeys 28 to 30 cents.

According to the feed reports it appears that poultrymen will have to make up their minds to utilize screenings and lower grades of wheat more extensively than in the past, or else use other feeds as substitutes for wheat. Some poultrymen report difficulty in getting the laying stock to eat freely of low-grade wheat after having been accustomed to the hard wheat. It is necessary to make the change gradually and even then there may be a slight falling off in production.

Diseases of the Liver and Intestines.

At the present time when growing chicks are attaining an age of from one month to ten weeks, a disease (known as Coccidiosis) affecting the liver and bowels, This dis to Dr. Wickware of the Experimental Farm is quite prevalent throughout Canada and is probably responsible for many deaths at present attributed to white diarrhœa. The disease is caused by a small egg-shaped germ which inhabits the first portion and blind pouches of the bowels. It produces inflammation of the bowels and liver, the blind pouches showing the most marked alteration. The changes in the latter may vary from a filling up with a reddish granular looking mass of soft consistency to hard cores composed of lining cells, blood, etc. The liver may show changes varying from a fairly normal appearance to large areas of a yellow color which when cut into show a cheese-like centre.

Symptoms—The chicks appear dull and isolate themthemselves from the rest of the flock, usually remaining in
the hover or under the hen. The feathers become
ruffled; wings droop; appetite is lost and occasionally
the chicks will give utterance to a shrill cry, particularly
when trying to pass material from the bowels. A white
discharge is usually present although it may be rather
reddish in color and the vent may become pasted with
the material discharged. These are the prominent
symptoms in typical cases but chicks may also be badly
affected and exhibit no outward appearance of disease
until death suddenly takes place.

Treatment.—Treatment consists in dissolving fifteen grains powdered catechu in a gallon of drinking water.

This should be kept constantly in front of the chicks and should be changed every two days.

Prevention.—Prevention consists in the isolation of all ailing chicks from the remainder of the flock and the thorough disinfection of all the quarters and runs, which may be accomplished by the application of a limewash solution made by adding two and one-half pounds of stone lime to a pail of water, to which is also added one-half a teacupful of good commercial disinfectant. This should be applied full strength with a spray pump, brush or old broom, to all parts of the quarters, brooder houses, etc. The feeding troughs should be cleansed daily by scalding with boiling water and special care taken to prevent the chicks from getting their feet either in the feeding utensils or drinking fountains, as

the disease is transmitted from bird to bird in this way. The floor of the brooder houses should be covered with a coating composed of nine parts of sand and one part of air-slaked lime, and if the droppings are not removed daily, they should at least be mixed with a fair amount of air-slaked lime to insure proper disinfection. If the runs are not too large, it is also advisable to cover them with a thin coating of the above mentioned lime and either spade or plough them up. The chicks should be kept away from all adult fowls, and carcasses of dead birds immediately burned as burying only serves to keep the infection going from year to year.—Experimental Farms Note.

HORTICULTURE.

Controlling Slugs.

The slimy looking larvæ or "slugs" that eat the surface off the leaves of cherry and pear trees during July and August are easily killed. If there is no fruit on the trees, the best way is to spray the trees with arsenate of lead in the proportion of 1 pound of the powder, or 2 pounds of the paste, to each 50 gallons of water. A fine spray is best, and should be applied so as to cover the upper surface of the leaves, where most of the feeding is done

In case there is fruit on the trees you may use white hellebore, 1 ounce to 3 gallons of water. This will kill the slugs and do no harm to people who eat the fruit.

The same results may be secured by spraying with a strong tobacco decoction, such as Black Leaf 40, 1 part in 800 parts of water.

A thorough dusting with slacked lime, ashes or fine road dust will usually be successful in removing the slugs from the leaves.—C. P. Gillette, Fort Collins, Colorado.

A Dust Mulch in the Garden.

During the summer some vegetables wilt under the mid-day sun. The moisture is pumped from the leaves faster than the roots can draw it from the soil reservoir. However, after the sun sets the plants again attain their former freshness. In order to hasten growth and encourage a maximum yield some carry water to certain crops in the garden night after night during a dry spell. Undoubtedly they are rewarded for their labor, but considerable of this work could be saved by use of the hoe. It is generally believed that if undue evaporation of moisture were checked that the soil would supply the plant with the required quantity of moisture even in dry weather. Soil uncultivated for several weeks becomes hard and cracks, while the same kind of soil kept cultivated is quite moist an inch below the surface. Cultivation makes a dust much which the surface. Cultivation makes a dust mulch which checks evaporation. Therefore, if a certain soil is stirred occasionally it will reduce the necessity for watering it. Hoeing to form this loose soil also keeps weeds in check so that cultivation of the garden at frequent intervals serves a double purpose. It does not take long to go over a small garden with the hoe. If planting is done in rows a hand-cultivator could be used to advantage. While plants respond to watering, you should not neglect loosening the surface soil around the plants, especially when the weather clears after a heavy rain.

Crops, like celery, are sometimes mulched with straw, leaves, or strawy manure. Several inches of this material are placed between the rows where they not only hold moisture but give of their fertility to the plants. Frequent cultivation of the garden throughout the summer months will go a long way towards the production of maximum crops

Apples a Comparatively Light Crop in Canada.

The July fruit crop report, issued by the Fruit Commissioner's Branch, Department of Agriculture, is to the effect that heavy rains the fore part of the month have caused such fruits as cherries and plums to drop. and have also induced the rapid development of apple scab. The apple crop, particularly of the late varieties, is light in Lambton, Norfolk, Essex and the Niagara District, although in some orchards the early varieties promise a fair yield. Throughout Western Ontario the crop is practically a failure, being estimated at not over fifty per cent. of last year's. The crop in the Lake Ontario district is very scattered. In some orchards in the Trenton district there will be a good crop. In the Cobourg section not over sixty per cent. of last year's crop; Prince Edward County about twenty per cent. of normal with considerable scab beginning to show; in the South Bay district, Spys, Baldwins, Russets and Greenings are about twenty per cent. of the normal crop, with Ben Davis, Baxter, Stark, Mann, Snow and similar varieties seventy-five per cent. of a full crop. With the exceptions of Spys and Russets reports from the north shore of the Bay of Quinte indicate a good avernorth shore of the day of Quinte indicate a good average crop. Bowmanville reports about sixty per cent. of last year's crop, but scab is developing. In the Oshawa District early varieties are a fair crop; Baldwins and Spys light, Ben Davis and Stark medium. It is estimated that the total crop will equal that of last year. It is believed that there will be thirty per cent. of an average crop in Newcastle district, but in Durham County it is believed that there will be less clean fruit than in any year since 1885. In the Georgian Bay district, Spys, Baldwins and Greenings are very light, with Kings, Russets, Snows and early varieties about fifty per cent. of a normal crop. In Quebec the early varieties