The Farmer's Advocate
AND HOME MAGAZINE.

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welfare of the farmer is a bigger consideration than party politics, then these men should be sent to parliament, untrammelled by party ties and right instead of might rule right here in our big Dominion, where our farmers get so much free advice from city men, and where so much interest is taken to keep the wool carefully pulled over the producers' eyes. While the Big Interests pat the farmer on the back with one hand and tell him what a great fellow he is and that he is the real backbone of the country, they slip the other hand into his pocket and walk away with the key to the whole situation and soon proceed to lock him away from a certain amount of his just dues. We cannot get too much education to overcome this. If our educational system trains men to help get money away from their fathers and mothers, then it is at fault? Our trained men on the farms have a great duty to perform.

Nature's Diary.

A. B. Klugh, M.A.

The Chickadee is singing his spring song. Some there are who declare he says "Spring's here, Spring's here," though personally I would rather exonerate him from the making of a somewhat premature announcement. But it certainly is true that during the winter we hear a good deal of his merry call-note, "Chick-a-dee-dee-dee,' but very rarely his beautiful minor, whistled song. As soon, however, as we get the bright days of strong sunshine he bursts into song. A most lovable little bird is the Chickadee, we have many birds of far gayer plumage, many with greater musical abilities, but they are mostly of a roving disposition, so recording to fact that they come before the advent of our swift, warmer bird. Not so the Chickadee, he is not returning to any sense of the word, he will persist in his presence on the end of a twig within a foot or two of your nose, and summer heat or winter cold it is "business as usual, at the old stand" with him.

Not only is the Chickadee a very congenial companion, but its economic standing is very high. All those who have dealt with its food-habits place it among the farmer's best friends. E. H. Forbush, the State Orinthologist, of Massachussets, says: "Believing from my own observations that the Chickadees were feeding on the eggs of the fall canker worm, I asked Mr. Bailey to attract the birds to the orchard by suspending pieces of meat, bone, suet, etc., from the trees. These food materials are suitable for insect-eating birds at times when the trees are covered with ice or snow, and when, lacking such nourishment, they might starve. Although birds will frequently visit this food provided for them and in time will eat a considerable portion of it, they do not depend entirely on this for aliment, but spend the greater portion of their time in searching for insects and eggs in the immediate vicinity.

"Finding a plentiful supply of food the Chickadees remained about the orchard most of the winter. As they became accustomed to Mr. Bailey's presence they grew quite tame, and could be viewed at a distance of a few feet. He was thus able to determine, without killing them, what they were feeding on, and was soon convinced that they were destroying the eggs of the canker worms in large numbers, as well as the hibernating larvae and pupae of other insects injurious to trees.

"To determine how many eggs a single Chickadee would eat a few birds were killed and their stomach-contents examined, with surprising results. The large number of 1,028 eggs were found in the stomachs of the four birds killed. Four birds killed later in the season had eaten 105 adult females of the spring canker worms, in addition to 600 eggs. Mr. Bailey carefully counted the eggs in the ovaries of 20 of these moths and found the average number to be 185. Mr. Bailey is positive, from his continuous field observations that each Chickadee will devour on an average 30 female moths per day, from March 20th to April 15th. Thus if the average number of eggs laid by each female is 185, one Chickadee would destroy in one day 5,500 eggs; and in the twenty-five days in which the canker-worm moths "run" or crawl up the trees, 138,750 eggs. When we consider that 41 of these insects, distended with eggs, were found at one time in the stomach of one Chickadee, and that the digestion of the bird is so rapid that its stomach is probably filled several times daily, this estimate made by Mr. Bailey seems a very conservative one.

Towards the last of April the House Sparrow began to make their appearance in the vicinity, and drove the Chickadees to the woods. I believe that the House Sparrow is largely responsible for the fact that Chickadees are not now found nesting in our orchards. Previous to the advent of the House Sparrow in this locality Chickadees were frequently found nesting in old apple trees in the orchards."

W. L. McAtee, of the U. S. Biological Survey, says, "Next to the Woodpeckers, Chickadees are probably the most important enemies of the Codling Moth. Their habits of searching every nook and cranny, however small and difficult of access, and the thorough way they go over trees and stumps enable them to find the favorite hibernating quarters of the larvae."

In the lists of birds given by the Massachussets Board of Agriculture, as feeding on the Gypsy Moth, Brown-tail Moth, Forest Tent-caterpillar, Tent-caterpillar, Canker-worm and Plant-lice, the Chickadee is found in every list.

Forbush, writing of birds which destroy hairy caterpillars, says, "The Chickadee is a great destroyer of hairy caterpillars. Too much cannot be said in favor of this most useful and harmless bird."

Clarence M. Weed in "The Winter Food of the Chickadee" says in conclusion, "The investigations recorded in this bulletin show that the Chickadee is one of the farmer's best friends, working throughout the winter to subdue the insect enemies of the farm, orchard and garden."

Nothing seems to cause an unloading of anything on the market like a slight fall in prices. As long as grain is on the upward trend everyone sits tight. The minute it drops five cents per bushel everybody sells and down it goes. The same is true in all lines.

THE HORSE.

Sore Shoulders.

The time is approaching when farmers will have more or less trouble with sore shoulders in horses. This trouble can, to a great extent, be prevented by care and attention. With horses that have been worked during the winter months there is little danger if care be taken to use good-fitting collars and to keep both collars and shoulders clean, but with colts or older animals that have not had preparation by more or less daily light work for some weeks before regular work commences, danger is great. In such cases the muscles and skin of the shoulders are tender and soft, hence have little power of resistance to friction and pressure by the collar. The hair of such animals is usually long, it becomes wet with perspiration, collects in balls or rolls, makes an uneven surface upon which is exerted pressure and more or less of a rolling motion of the collar, and results in trouble. In a previous article we have discussed the advisability of clipping such animals in the spring, but at all events the shoulders should be clipped and care taken that the mane is not allowed to remain between collar and neck when the horse is at work. For the comfort of the horse it would be good practice to clip the mane off this part of the neck, but this does not look well, and if care be taken to draw it forward from under the collar danger is avoided. Then care must be taken to see that a proper fitting collar is used. It must be neither too long nor too short, too narrow nor too wide. It should fit the shoulders snugly, just about long enough to permit the fingers to pass between the lower part of the neck and the collar. It must not be tight enough at the top to pinch the neck, nor wide enough to permit of a rolling or side motion. It should fit the neck and shoulder nicely all the way down, of course, not narrow enough to pinch nor wide enough to roll. The face of the collar should be thoroughly cleaned daily, and the shoulders also regularly cleaned and rubbed. Some claim to derive great benefit from regularly washing the shoulders with cold water and salt. This has a tendency to stimulate the circulation, and may also to some extent render the skin less liable to irritation. By observing these precautions and allowing the horses periodical stops for a few minutes rest and lifting the collars forward to allow the shoulders to cool during these periods, then carefully lifting them back to their seats and attending to the mane as mentioned before starting to work again, for the first few days trouble can be largely avoided.

Care must be taken to look after the fitting of the collar. The muscles of the shoulders of the class of horses under discussion are soft and bulky when first put to work, and even though care and attention will avoid sore shoulders the muscles become harder and firmer, hence decrease in bulk and as a consequence no longer fill the collar. If this be not attended to the collar commences to roll and will cause soreness notwithstanding all care. When the neck no longer fills the collar either a proper fitting collar must be provided, or the extra space in the one worn must be filled with a sweat pad.

Unfortunately sore shoulders are not rare, whether the result of non-attention or not. They are of different kinds. The most common kind is the result of practical scalding, caused by perspiration and pressure. The parts involved become slightly swollen and tender to the touch or pressure, the hair commences to fall out, and after a time there is a raw surface. If this be noticed in time and the animal can be given a few day's rest, the shoulders bathed frequently with cold water and a cooling lotion applied, the parts will soon regain their normal condition and the animal be ready for work again. Probably the best lotion for this purpose is the ordinary "white lotion" made of 1 oz. each of sulphate of zinc and acetate of lead mixed with a pint of water, this is both cooling and antiseptic. In many cases when it is not easy to give rest the collar is padded so as to relieve the affected parts from pressure. If this can be done without causing undue pressure upon other parts it may have the desired result, but in many cases one portion of the shoulder is protected at the expense and soreness of another. If the parts become raw the frequent application of the lotion mentioned is the best treatment that can be adopted. Of course, the horse should be given rest or worked with a heavy breast collar. This in some cases gives satisfaction, but in many cases causes scalding and soreness where the collar presses. If rest cannot be given the lotion should be frequently applied, the facing of the collar kept clean, and the sore parts dressed lightly with oxide of zinc ointment or a little sweet oil before putting the collar on, in order to prevent the skin becoming adhered to the collar. In addition to the preventive measures already mentioned the removal of the harness at meal times, even though it be for only an hour, gives the shoulders and collar opportunity to become