### BLACKHEAD MOST SERIOUS DISEASE

The name "blackhead" comes from the fact that the head som turns dark color, although this is not an ever-present symptom. This condition frequently affects turkeys, and more particularly the young that old, but in rare cases it has been known to affect chickens. For turkeys it is a most serious disease, and often makes turkey raising difficult, writes Dr. George H. Conn in the Farm Jour-

The disease is caused by the ameba melagridis. This can be found in the affected birds in the liver and the bowels. The disease is spread by droppings from affected birds. The first symptoms noticed are a duliness and a drooping of the tail and wings. The feathers are ruffled, and the birds become inactive. A yellowish-green diarrhea follows, together with lack of appetite and rapid weakening and loss of flesh. Death comes in from three days to a week after the first symptoms, although in extreme cases the bird may live ten days. Occasionally the disease develops a chronic form which will linger on for many weeks.

The very best sanitary measures must be taken immediately. Sick birds should be separated from the well birds, and the well ones put in new quarters. Frequently it is necessary to discontinue the raising of turkeys for a year or so on an infected farm. In securing new birds to start the flock, it is always advisable to determine whether or not this condition has been present in the flock at any previous season. Birds from an in-fected flock should not be sold to other breeders.

Thorough disinfection, especially of the places where the flocks roost, is necessary. Be careful to see that when feeding and watering the flock

everything is as sanitary as possible.

Potassium permanganate placed in the drinking water, and also dissolved in water and mixed with feed, is a preventive of this disease. Use of this remedy with every hatch of turkeys until they are at least seebral weeks old is worth-while insurance against loss of young turkeys.

# Important That Ducks

. Have Sufficient Water Ducks must have water when they eat. The duck has no crop such as

the chicken has; its food will clog and choke it unless water is provided at meal time. Water must be deep enough to cover the holes in the beak. Note how the ducks blow out the air and dust from their nostrils when they have the luxury of snorting in deep water.

Do not give ducks, geese or chickens sweet milk one day and sour milk the next. The sour milk is better for them; sweet milk lacks the lactic acid which is wholesome, and will glue the eyes shut and clog the beaks since ducks fairly bathe their heads in it if ly dirty and they will not thrive in Control Stomach Worms damp and dirt. When they go down on their legs, fall-backwards or act crazy they are either suffering from coccidiosis, a parasitic disease of the intestines caused largely from eating over fowl-sick ground that is infected; or they are lacking in mineral elements in the ration. It is a good plan to put sand in their mash once a day, and also to give them bone meal or meat scraps.

# Use Sodium Fluoride to

Destroy Lice on Fowls

Don't allow lice to get a good foot-hold in your flock. The entire flock can be treated with sodium fluoride, a white powder that can be purchased in bulk. This powder can be applied by taking a pinch and working it well down between the feathers next to the skin around the neck and vent.

Equal parts of blue or mercuric ointment and vaseline is also effective." Place a small quantity of the ointment about the size of a pea on the skin below the vent. Be sure and treat every bird in the flock, for the fowl that gets away will carry enough lice to reinfest the entire flock in a short time.

Markers for Layers

No doubt, many flocks are less profitable than they might be, because the owners have no method which they can identify old h which are not worth he

# Garden Clean-Up to Kill Insects

Saves Much. Time and Money Next Year in Spraying and Dusting.

A few hours spent in giving the garden a fall clean-up will save much tis and expense next year in spraying and dusting to control insect pests according to gardeners and entomologists at the college of agriculture, University of Illinois. A general clean-up of the garden in the fall, preferably late fall, will do a great deal to reduce the available hibernating quarters of many of the most trouble and destructive insects. The benefits from this practice will be multiplied, if anyone will co-operate and thus make the clean-up general.

Forget Insect Troubles

After the season's crop has been harvested, the average gardener forgets his insect troubles for a while. However, at this time of the year certain steps may be taken which will greatly reduce the possibility of serious insect injury the coming vegetable season. This consists of taking active steps in the fall to clean up the garden. Many crops have a large amount of foliage which is left in the field or garden after the edible part of the crop has been harvested. Such trash and rubbish affords hibernating quarters for many of our most troublesome and destructive insects. Piles of cucumber, melon and squash vines left in the field offer excellent shelter for the striped cucumber beetle and squash bug during the winter. The potato stalk borer, which has been very destructive to eggplants in some sections, winters over in the stalk of the eggplant, potato and tomato. Cabbage stumps and leaves left in the field offer protection for the various species of cabbage worms.

Serious Cabbage Pest.

"In areas where the harlequin cabbage bug is a serious pest, the practice of cleaning up the fields in the fall will greatly reduce the possibility of injury the following season. Where possible, the cabbage stumps should be pulled and destroyed. The tarnished plant bug, which feeds on a large variety of vegetables, hibernates h all sorts of rubbish about the field. Boards scattered loosely about the field offer shelter for many insects. They should be collected, the old, use-less boards destroyed, and the good pieces piled compactly. Where onion sets are grown, it has been found advisable to clean up the field after the sets have been harvested and screened. The piles of onion refuse that accumulate where onions have been milled and screened should be burned, as they contain large numbers of the puparia, or resting stage of the onion maggot. Immediately after the onions have been milled and screened, the resulting refuse will burn quite readily.

"It is important to go one step farther than cleaning up the garden proper. Clean up the weeds and grasses along fence rows and field margins. All weeds and grasses should be cut and destroyed, and where possible the ground should be plowed."

by Change of Pasture

Sheep heavily infested with stomach worms cannot be thrifty and profitable. At the Ohio experiment station it is recommended that control be obtained by frequent change of pasture and by dosing.

Dosing may consist of either copper sulphate or nicotine sulphate (Black Leaf 40). Never use both treatments at the same time. The copper sulphate solution is made by dissolving two ounces of dark blue copper sulphate crystals in one gallon of water. The nicotine sulphate is prepared by adding two teaspoonfuls to one quart

of water. Keep the sheep off feed for 18 hours before and six hours after treatment. If possible, turn them on pasture not grazed by sheep for two months previous. Give sheep weighing 50 to 60 pounds one ounce of either solution, but never both. Sheep weighing 60 to 80 pounds need one and one-half ounces, and all sheep over 100 pounds, three ounces. Dose with an oil can or syringe.

Tight Floor Simplifies

Sanitation of Henhouse A tight concrete or board floor is a big aid in maintaining a sanitary a big aid in maintaining a sanitary henhouse, poultrymen of the college of agriculture, University of Illinois, point out. A dirt floor cannot be cleaned satisfactorily, and further-more in case of a disease infection or worm infestation, there is little chance to yet rid of the trouble. Concrete is

### COW TESTING PAYS LARGE DIVIDENDS

Records kept by cow-testing associ-tions in North Carolina pay large lividends when the results are studied and applied to the owner's hard, tates J. A. Arey, dairy extension spe-inist at the North Carolina State

Mr. Arey gives the experience of two herds in one of these associations. One held contained 21 cows, while the other had only 8, yet the difference in profit over feed cost, was only \$5.01 in favor of the larger herd. The owner milited, fed, and tended 12 cows the greater part of a year for \$5.01. The not receipts were \$607.59 for the larger herd as compared with for the larger herd as compared with \$002.05 for the small herd. The own-er of the smaller herd had better cowe and fed them in proportion to

their production.

There is a gradual improvement in all herds where the testing work is, being carried on, states Mr. Arey. The production cost shows a decerase with a corresponding increase in actual production. This, he finds, is due to the adoption of better feeding methods and the elimination of the low producing cows.

low producing cows.

"There has been an average of 20 cows sold each month from the herds in the five cow-testing associations in the state," says Mr. Arey, "and this elimination will continue until all unprofitable cows have been rold or laughtered.

"Twenty-five cows in the Wake Durham association were found to be unprofitable and were either sold or butchered. In the Forsyth-Davie as sociation seven cows were sold for beef, and other associations report

numbers ranging from three to seven-teen as being sold or slaughtered.

"A standard dairy ration recom-mended by the dairy extension spe-cialists is being used in all herds, and records show that the average production and cost is very close in all asso-

Train Calf by Gentle

Treatment at All Times Make the calf like to be handled. This can best be accomplished by gentle treatment at all times. Teach the calf to lead by handling it gently. One good way to do this training is to use a small stick. The calf should walk on the right side of you and should be trained to mind the stick.

Teach the calf to stand quickly in one position. Then it should be trained to stand with its weight evenly distributed on all four legs, which should be squarely placed. The head should be held up and to the front and the back straight and firm.

Because the calf which flinches, pulls, kicks, is easily frightened, or stands in a position that makes its back sway, or its rump appear faulty does not readily catch the eve of the judge, the calf should become accustomed to strange people, sights, and sounds. A little training every day much better than a half day of it once each month.

## Large Amount of Silage

Proves Harmful to Bull Many farmers allow the bull to run

with the herd and consequently pay no particular attention to his feed. Where silage forms a part of the ration this

is to be discouraged.

It has been proved that a liberal amount of silage/six pounds or over, promotes sterility in the bull. From the data gathered in numerous experiments it would seem that even s small allowance will reduce his vitality. With farmers learning to have milch cows freshen in the fall it would appear that sliage can be wholly omitted from the ration for the bull.

It is true that the bull recovers from the effect of silage, but this means early spring calves, a thing that the mas with milk cows does not

## \*\*\*\*\*

Dairy Notes

eed, good care, or prope st of a poorly bred

Six Reasons For Bu A Star Car

1—It has more POWER.

2—It has more SPEED.

3—It accelerates FASTER.

4-It has more ROOM.

5—It has more STYLE.

6—Per-mile cost is LESS.

Let your nearest Star Car dealer prove it!

Low-cost Transportation



IMPROVED STAR FOUR \$470 Tuering . . . \$550 Coach . . . . . 675 Sedan . .

THE NEW STAR SIX

OUND PLEETRUCK Ton Chassis . \$975

DURANT MOTORS, Inc., 250 West 57th Street, New York General Sales Department, 1819 Breadway, New York Plants: Elizabeth, N. J.; Oakland, Cal.; Lensing, Mich.; Torones, Dealers and Service Stations throughout the United States, Canada and M

MORE POWER AND SUPERIOR QUALITY

Family Bookkeeping

"I wonder if Bill knows his own failings." "He ought to; his wife keeps the list."—Boston Transcript. At the Clothier's

Clerk-A suit? Yes, sir-what cut do Dad-Cut price.



Teething Drops and Soothing Syrups, especially prepared for Infants in arms and Children all ages.

To avoid imitations, always look for the signature of Chart Helichers.

Proven directions on each package. Physicians everywhere recommend is

Reindeer Sandwiches

They're making "hot dogs" from reindeer meat now. Machinery for the manufacture of the delicacies from reindeer meat has arrived from Seat tle, and large shipments to the states will soon be made.

Keep a stiff upper lip and a ch ful front, and the world will join hands with you.

While most of us like dogs, we find our inferiority complex on top in the presence of pedigreed ones.



Unless you see the "Bayer Cross" on tablets you are not getting the genuine Bayer Aspirta proved safe by millions and prescribed by physicians for 25 years.