BEWARE OF WORMS.

Intestinal parasitism of fowls is brought to attention at this season of the year because the most striking phase of the disease is often seen at this time.

This disease is vastly more prevalent than tuberculosis, with which in its chronic form it may be confused clinically, and from an economic standpoint it probably ranks second only to roup.

In order properly to understand the disease the following brief description of the chronic form is given since it may precede or follow the acute form.

The sick animals become thin, although the appetite is not especially disturbed. At times the appetite is even increased and is accompanied by an intense thirst for cold water. The droppings are thin, contain considerable yellow slime, and are passed in small quantities, but at short intervals. After a time other symptoms develop. The sick animals become dull and listless, remain apart from the rest of the flock—the feathers are ruffled and the wings droop, the appetite is lost and the birds allow themselves to be easily caught. Impaired organic functions lead to extreme emaciation and a fatal termination usually follows, when the subject is but a mere shadow of its former self.

It is not the chronic form, however, that we are primarily interested in at the moment, but with a form so acute as to be very misleading. Suddenness of onset and great prostration usually lead to the assumption that the birds have consumed poisonous material. This belief is further favored, in many instances, by the fact that no previous indication of disease has existed.

In so far as we have been able to learn, these attacks are always associated with sudden changes in weather conditions. The usual history is to the effect that birds are found in a prostrated condition, comb and wattles suddenly become dark in color, followed by death in one to three days, and this occurs just after a sudden drop in temperature usually preceded by rain.

By this it would seem that the birds are able to hold their own against the parasites under favorable conditions, but are unable successfully to carry on the fight when reduced by adverse influences.

Accurated diagnosis is the first essential and the fact should be kept in mind that one of the most devitalizing tape worms is so small as to require a microscopical examination to determine its presence.

Treatment should be directed towards fostering the already waning strength of the patients rather than attempting to destroy the parasites. The latter course will usually result in the death of many birds that otherwise might be saved.

A small dose of physic is indicated, merely to remove from the intestines the slime with its accumulated toxic products. Grain feed should be withheld, the ration consisting entirely of easily digested wet mash. Good hygiene should be practiced and, where outside roosting places have been used, these should be substituted by regular houses.

When by careful handling, the birds regain their normal condition, further doses of physic (Epsom salts) may be administered; one-fourth pound to one hundred birds once a week or every ten days is recommended.

THUMPS IN YOUNG PIGS.

The term "thumps" is applied to a nervous disorder of young pigs which is characterized by violent jerking movements of the body. The jerking movements of the body are caused by spasms affecting the diaphragm or midriff which is the muscular partition separating the chest and abdomen and is an important organ of respiration. This spasmodic contraction of the diaphragm is similar to hiccoughs in people. The cause of the trouble appears to be due to some disturbance of the nerves which supply the diaphragm. In many cases the nervous disturbance is the result of some derangement of the digestive system. Lack of sufficient exercise and overloading of the stomach are common causes of Thumps in young pigs. At times there appears to be an inherited tendency to this trouble in the case of litters from pampered overfed sows. When pigs become affected with Thumps the trouble is plainly shown by the thumping, jerking movements of the flanks. The jerkings are sometimes so marked that they move and sway the body back and forth. The attacks are usually more aggravated after feeding when the stomach is full. The trouble may only last for a few days in some cases and in others it may last for several weeks and some fail to recover.

Prevention and treatment—This trouble of young pigs can be largely prevented by allowing them exercise and avoiding overfeeding. When they become affected they should be made to take exercise in a good, large, roomy place. In summer they may be turned out to pasture and allowed to range about. Badly affected pigs should be given a dose of castor oil to clean out the stomach and bowels. To lessen the spasms of the diaphragm from five to ten drops of laudanum can be given every four or five hours. The affected pigs should be kept on a light diet for a few days and kept hungry so as to encourage them to roam about more and get plenty of exercise.

THE SELECTION OF A BROOD SOW.

The importance of the careful selection of a brood sow cannot be overemphasized, so says Professor Wade Toole of the O.A.C. It is true that the sow's influence is reflected on her own litters only, whereas that of the boar is reflected on all litters which he sires, and while many characteristics are common to both sexes of breeding stock, there are others which are very essential to the respective sexes and opposite in nature.

Information as to the history of the ancestry of a young sow is of considerable value. Experience and observation go to prove that certain outstanding qualities are common to strains or families of hogs of different breeds rather than simply breeds themselves. There are good and bad in all our breeds, consequently the prospective purchaser should ascertain as much information as he can concerning the type, the quality and the prolificacy of her ancestry, whether or not they have been thrifty and economic feeders and whether or not the sows have been good mothers. Canadian hog raisers can well take an object lesson from the results which the Danish breeders are experiencing where all the above information is available to the prospective purchaser. Moreover, every breeding hog must measure up to a certain standard before that hog is eligible for sale.

Storage of Vegetables for Home Use in Winter.

It is to the interest of every family to grow each season a supply of those vegetables suitable for storage, and to see that they are properly stored for use during the winter months when prices are high and vegetables often hard to get. Less work and less expense are involved in keeping them by other methods, as canning, drying, and preserving, and the product retains its characteristic flavor.

Potatoes, beets, carrots, parsnips, winter radishes, turnips, rutabagas, salsify, kohl-rabi, may be stored as follows:

Small Quantities—Store in boxes (or heaps) of slightly moist (not wet) sand or sandy soil in a cool cellar. Put in alternate layers of sand and vegetables. Vegetables stored in this way will not shrivel. Tops of vegetables should be removed, of course, before storing. Do not cut beet tops close.

Large Quantities—Store in root cellar in bulk, or in outdoor pits, as follows: Make excavation six or eight inches deep, four feet wide, and as long as necessary. Cover ground with layer of straw, and place vegetables in conical heap of any desired length. Cover with twelve to eighteen inches of straw. On the layer of straw, as the weather gets colder, place a layer of soil four to six inches in depth. If some straw is left protruding at the top of the pile at first, it will provide for the passing off of any heat which may be generated when the vegetables are first covered. This protection will suffice except in the most severe weather, when an additional layer of straw may be added.

In removing the vegetables from the pit after the layer of soil is frozen, a small hole may be chopped in one side and the vegetables needed taken out.

Early Seeding Best.

A very important factor, says the Dominion Field Husbandman in his annual report, in increasing the yield of crops is early seeding. With no additional labor or seed, the yield on land planted early in the spring is very much larger than on land seeded later. It is obvious, he adds, that this increased yield is reflected in larger returns and greater profits. A table in the report recording six sowings shows 53.3 bushels of oats, 38.4 bushels of barley, 17.9 bushels of spring wheat and 30.4 bushels of peas per acre, for the first sowing and 59.5 bushels of oats, 44.2 bushels of barley, 20.5 bushels of spring wheat, and 33.9 bushels of peas for the second sowing, seven days later. The reduction for each sowing made later is gradual but very decisive. Commenting upon this fact Mr. E. S. Hopkins, the Field Husbandman, points out that while the second date of seeding at Ottawa gave the highest yield in every instance, it must be remembered that this land was drained and, perhaps, with many farmers, especially in fields containing wet pot-holes or water courses, their first seeding would more nearly correspond as to date with the second seeding at the Central Experimental Farm. Inasmuch as the land and the seed were uniform, the decrease in yield is regarded as due solely to the late seeding.

TWO FAMOUS BULLS IN CANADA

The Prince of Wales has inherited a love of farming and goes about maintaining his farms in a scientific way. Above are two famous animals he brought to Canada from one of his English estates, placing them on the E. P. ranch. Above is Fairie Prince, and below Climsland Broadhook, both prize winning Shorthorns.

Preparing for the Ice Harvest Next Winter

The regular harvests of the fields are now taken care of and stored for use next winter. The fields are plowed and ready to receive the greatest possible benefit from the action of the winter's frosts. It will not be long before all vegetation will be dormant again and once more we will be in the grip of the Canadian winter. The winter season brings considerable relaxation for the farmers but yet the wide-awake and up-to-date ones will find something more than the chores to do. They will be planning for the next year's business and, as Ontario is extensively engaged in the dairy industry, many of them will harvest and store a quantity of ice to be used next summer for cooling the milk and cream. As ice is harvested early in the year, the ice crop may be justly called the first crop of the year.

PREPARE NOW FOR THE WINTER'S CROP.

It is now none too soon to make preparations for this winter harvest of the ice crop, so says Professor R. R. Graham, Department of Physics, Ontario Agricultural College. Some may be for the first time planning to harvest some ice this winter and they will in all probability need to construct some sort of building or bin in which to store it. Those who have regularly stored ice may have to make some alterations or repairs to the old ice storage. In any case it is a good policy to make the necessary preparations early and so have everything in readiness when the time comes to cut and store the crop.

HOW TO BUILD THE ICE HOUSE.

The storage for the ice need not be an elaborate and costly one. Ice can be kept successfully in various sorts of storages:—a large bin made of single boards nailed on ordinary studding or cedar posts and located inside some other building, as a shed or barn; or outside as a simple lean-to on the shady side of a large building; part of a hay-mow; an old silo; or a more costly and attractive building usually called the ice house or cold storage building.

SUCCESS DEPENDS UPON TEN CONDITIONS.

The style of ice storage really does not count provided the following conditions are fulfilled:

1. That the ice be cut from a body of clean water and free from weeds and sediment.
2. The cakes should be cut regularly and all of a size. The ice should be at least 12 inches thick.
3. The ice should be stored on a cold, dry day.
4. The cakes should be packed together as closely as possible without any sawdust or other material between them. Any spaces between the cakes may be filled with finely broken ice or snow.
5. Plenty of dry sawdust, at least 12 inches, should be packed between the mass of ice and the walls of the enclosure, and even a greater depth below and above the ice.
6. The top of the ice storage should be provided with good circulation for air in order to prevent accumulation of warm, stagnant air over the ice. This point cannot be emphasized too strongly.
7. The ground below the ice pit should be well drained in order to readily carry off the waste from the ice.
8. The wall around the bottom should be air tight.
9. The ice should be kept well covered with dry sawdust all summer after each time ice is removed.
10. As far as possible the ice storage should be out of the direct rays of the sun, but yet in a place where there is good circulation of air.

It is possible to secure most of these conditions in a very cheap and simple construction and therefore the storage of ice need not give one much concern. The better style of ice house is usually constructed of a wall consisting of one layer of boards on each side of 2x4 studs, the space between being left empty.

THE AMOUNT REQUIRED REGULATES SIZE OF STORAGE.

Most of the ice stored on farms is used for cooling milk and cream and keeping it sweet for short periods. When both milk and cream are cooled it is necessary to store 1½ tons per cow kept, this amount covering a reasonable waste by meltage in the storage. If a refrigerator is used in the house or adjoining the storage where foods for the table are kept, 2 or 3 tons extra should be stored.

HARVESTING THE CROP.

This crop is not the pleasantest one the farmer has to handle, as it is usually a pretty cold and wet job. Lots of good company while working at this job is a great help and therefore cooperative effort should be carried out in this line of work. The job can be done more efficiently, quicker, more economically and under more pleasant conditions than by the single-handed method. The job is worth while, and, if gone about in a sensible manner, is not too objectionable—certainly not nearly so bad as standing at the tail-end of a threshing machine.

It is the hope that more farmers than usual will plan to harvest some ice the coming winter. The Department of Physics, O.A.C., Guelph, Ont., will gladly supply bulletins and blueprints describing ice houses, small cold storages and refrigerators, and describing in detail how the harvesting is done. Write us early.

GREAT CHIEF "SUNRISE SEEKER."

It is a curious coincident that the announcement of the new international reparations policy was made on the day on which Lloyd George reached Washington, and indicates that his crusade for United States cooperation is attaining results.

—From the Passing Show, London.

The Sunday School Lesson

NOVEMBER 4

Some Missionary Teachings of the Psalms—Psalm 47: 1-9; 67: 1-7; 100: 1-5. Golden Text—Let the people praise thee, O God; let all the people praise thee.—Ps. 67: 3.

LESSON SETTING—In the 67th Psalm, we see God lifted up as king of the nations while Israel, as the chosen people of God, occupies a place of preeminence among the nations of the world. In the 100th Psalm the nations are called upon to the glad service of the Lord. In some way the nations are to be sharers in the blessedness of the great day, even if Israel's place in next the throne and drinks first from the cup of joy. These psalms are far from being hymns of hate. The dominant theme is not Israel's place in the sun, but the world's place in the sun.

I. THE WORLD JOINS IN ISRAEL'S SONG, PS. 67: 1-3.

Vs. 1-3. *God be merciful to us.* The two notes of this Psalm are prayer and thankfulness. It was evidently intended for some temple festival, such as the Feast of Tabernacles. There has been an abundant harvest. The granary is full of wheat and the heart is full of gratitude. Gratitude is beautiful, and praise is always comely. But the singer desires more than the blessing of field, store and basket. He seeks a blessing from God upon his soul. The consciousness of God's loving favor seems to the psalmist to be the crown of all blessings. *That thy way may be known upon earth.* The psalmist thinks of what may be the larger and wider results of God's goodness to his people. He prays that this goodness of God to Israel, when seen by the nations, may turn their thoughts to God and to his service. "Thy way" means God's dealing in history. *Thy saving health;* a beautiful expression for salvation. Salvation is the health of the soul, just as sin is the sickness of the soul. We must keep in mind that religion makes for the normal life of the soul. It is not artificial or abnormal. So a world-wide Christianity will produce the health of nations. *Let the peoples praise thee.* The psalmist brings a beautiful picture to our mind. The world becomes choral with praise. Israel's note of praise is taken up by the peoples of the earth. They forget their hates and jealousies in the praise of God. In a world which is ordered aright, noble enthusiasms are as contagious as are evil thoughts in a world not ordered aright. Israel cannot sing before God without being overheard of the nations. We cannot wait until all nations simultaneously, and in equal measure, begin to do the right. Some nation must begin to do the right. Others will not fail to respond. This is the faith of the psalmist.

II. THE WORLD RULED BY ISRAEL'S GOD, 4-7.

Vs. 4-7. *Thou shalt judge the people righteously.* When the nations submit themselves to the government of God, they will find it as Israel found it,—just and equitable. And just as song begets song, so divine equity begets human equity. A sense of the justice of God in dealing with men is the foundation of just dealings between man and man, and between nation and nation. *The earth yield her increase.* The harvest of abundance is regarded as a gift of God, but again the psalmist prays for the deeper blessing of God, and sees the ends of the earth gathered in the worship of God.

APPLICATION.

This psalm may be used as a prayer for Foreign Missions. Let us see where it begins,—not with Tyre and Sidon or Egypt and Babylon, but at Jerusalem.

God be merciful unto us. The true missionary prayer does not begin like the Pharisee who said, "God, I thank thee, that I am not as other men are," but takes its rise with the cry of the Publican,—"God be merciful to me a sinner." There never can be the Foreign Missionary interest that should be, until something happens to the Church at home which will make us to feel how far short we come in ourselves, and what a wonderful thing God can do for us through the gift of his son. *Us,* not the heathen,—O Lord, forgive.

And bless us. The word "blessing" in the Old Testament is equivalent to welfare, moral and spiritual, with the accent upon the spiritual. God be merciful unto us and make us better men and women. Another thing which must happen to the Church at home, ere the missionary interest shall reach flood-tide, is that we shall be overtaken with an over-mastering desire for excellence.

And cause thy face to shine upon us. "O 'twas love, 'twas wondrous love, the love of God to me,"—the loving-kindness that Moses saw from the cleft of the rock as Jehovah passed by and revealed his glory, the loving-kindness we now see as we look out from the cleft in the rock of ages, unto the perplexing amazement of being.

Having begun at home, this prayer now takes wing and goes forth into all the world.

That thy way may be known upon earth,—the way of loving purpose of God in history. God revealed his presence and his purpose to Israel in order that the whole world might know him. In devoutly praying for this consummation, the psalmist shows himself to be a man far in advance of his time.

And saving health among all nations. The world needs not only a revelation, but a redemption. The world, as Lord Robert Cecil puts it, is possessed by the twin demons of fear and hate, and not till these devils are cast out of mankind shall we have true poise and power.

Let all the people praise thee. The earth and sea and sky show forth the glory of God. Why not man, the roof and crown of things,—all men for that matter. Once upon a time a certain man thought he was responsible for his neighbors,—only those whose land touched his. This made his neighborhood a small affair until he was told that he owned his land right down to the centre of the earth, where all lands meet. Then he knew that his neighborhood was the whole earth.

God shall bless us. He will, when we take our Foreign Missions seriously. The light that shines farthest from home shines brightest at home.

All the end of the earth shall fear him. Pessimists declare that the world is getting worse, that it never will be any better than it is. That way lies no hope of progress.

This is our faith tremendous
Our high hope who shall scorn
That in the faith of Jesus
The world shall be reborn.

The Dairy

Dairy experts the world over tell us that the most common and costly mistake of dairymen is the under-feeding of good cows. Feeding for profit is liberal feeding or feeding to the full capacity of the cow.

Of course, there is a limit to the capacity of the cow. To know just when that capacity is reached one must have a thorough knowledge of the individual cow as well as cows in general, and of feeds.

For example, a highly specialized dairy cow, when fed all that she will take, converts everything over and above the maintenance ration into milk. Unfortunately, all cows are not good dairy cows. Some make all the productive ration into milk for a few months after coming fresh and then start putting on weight. Others do this within a few weeks after coming fresh. Generally speaking, one cannot afford to give a dairy cow all she will eat if she is gaining weight. There are times, however, when it is best to make exception to this rule. For instance, some cows in the early part of the lactation period lose in weight—that is, they produce milk at the expense of their flesh. Toward the end of the milking period they regain the weight they have lost. Such cows can be fed liberally for they will turn that extra feed into milk again the next time they are fresh.

Here are a few elementary rules to guide the less experienced:

1. Feed all the roughage a cow will eat up clean, adjusting the grain ration to the milk production. Only when a cow tends to become over-fat should the quantity of roughage be restricted.
2. Feed one pound of grain mixture for every three pounds (or pints) of milk produced a day by the cow. Or, another rule is—one pound of grain a day for every pound of butter-fat produced a week. If the cow is a big producer cut that proportion of grain down slightly.
3. Feed all the cow will respond to and if she starts putting on weight cut down on the grain.
4. Do not put too much salt in the food but have a box of rock salt always where the cow can lick it.
5. Give the cow plenty of pure water; milk is over three-fourths water.

Live Stock Market in August.

Cattle received at the public stock yards up to the end of August totalled 457,534 head compared with 430,675 in the corresponding period, last year. Receipts of hogs totalled 637,692 head compared with 477,165 head last year. Calves totalled 162,514 compared with 172,025 last year, a decrease of upwards of ten thousand. Receipts of sheep and lambs during the eight months were upwards of sixty thousand less than last year, the total being 169,372 compared with 229,646. Commenting upon the latter fact the monthly review of the Dominion Live Stock Branch says, "This falling off is worthy of serious consideration, being common to all provinces and not justified by conditions in any. During 1922 the sheep market was the strongest trade in the market, and under much heavier supplies than now." Prices responded to this state of things, for while cattle were but a little up compared with last year, good steers averaging at Toronto $6.90 compared with $6.87 per hundred in 1922, hogs were off rather more than two dollars per hundred. On the other hand calves were up nearly ninety cents, the average for veal calves being $10.04 compared with $9.17 last year, and good lambs selling at $11.75 this year against $9.06 last year and light sheep at $5.66 compared with $4.92.

The farmer's most extravagant animal is the scrub sire.

The smooth stock salesman is around again. When he calls at your home, propose inviting in several of your good neighbors. Then all get in the flivver and go to your local banker to place the proposition before him.

A great army of boys' and girls' club members are now laying out their campaign for another year's work. How much more successful will this campaign be if these young folks have in reserve the fullest support of the "heavy artillery" back home.

MAKE UP YOUR MIND TO GET WELL.

Perhaps you have heard of the French gentleman called Dr. Emile Coue, who is not a doctor of medicine, yet is having a great deal of attention because of what he has to say about getting well of disease. He has written a book which is enjoying a wide sale in this country, partly because it is very well advertised and, of course, we know that it does pay to advertise, no matter whether it is pure-bred chickens or a book on getting well. The advertisements say that his plan has helped to greater health, happiness and success, "countless thousands, from the rheumatic octogenarian to ailing children." It is frankly admitted that the plan is one of auto-suggestion, and it is claimed that in all Europe and much of America, Dr. Coue's formula is on every tongue. It might be well, for it is a pleasant formula and easy to repeat. The words are: "Day by day, in every way, I am getting better and better."

Like the sugar-coated pills of our childhood this is an alluring prescription. There are two questions that naturally arise, however. First, does it do any good? Second, can it do any harm?

Question number one can only be answered with proper consideration of the case to which it is proposed to make the application. Should this be a case that is not of a progressive and destructive character it will do good. The very act of bravely summoning your spirit to declare that you are winning your way to health removes some of the inhibitions of fear and gives a better chance for cell repair and construction of new tissue.

But question two is also worthy of consideration; for the plan can do harm. You may be fighting some morbid agent that is both progressive and destructive. It may be some active and virulent disease, such as diphtheria. Science has discovered an anti-toxin for this disease and it is urgent that such anti-toxin should have early administration. All the pleasant and cheering words that you can repeat will do nothing against the poison of diphtheria. And while you are trying to comfort yourself with their repetition the disease is making headway to the point where it will be beyond control by anti-toxin or any other agent. There lies a terrible danger.

After all, every good doctor understands about giving suggestive therapy and practices it in every smile and encouraging word. The safe way is to leave it to the doctor, or at least to combine the formula with the best care that the doctor can give.

Rust-proof Paint.

Probably one of the greatest enemies to the life of machinery is rust, which often attacks machinery as safely housed as is the farmer himself. One method of prevention is to coat the articles with a rust-repelling mixture.

A rust-proof paint which is said to resist all atmospheric changes, even that in a salt-water locality, is composed of five pounds of tallow and one pound turpentine melted together. Melt separately eighteen ounces of sulphur, five and one-third ounces of caustic potash, and one ounce of copper filings. Mix this with the tallow and turpentine while hot, and apply with a brush the same as paint.

Our Day.

A little sun, a little shade,
Is how the big, old world is made—
A broken toy, a silver tear,
And then a kiss from Mother dear.

A little study, then some play
Before the night shuts out the day;
Then sink to sleep without a care,
Our keeping left to God, in prayer.

—Lereine Ballantyne.

The mind grows better when the weeds are kept down.

The Province of Alberta made more than 18,000,000 pounds of creamery butter during 1923.

The cow and the garden are the bulwark of health upon the farms of the nation. See that both are properly looked after.

A blind chameleon ceases to change its color and remains dark in tint. The reason of this peculiarity has never been explained.

Taking a day off to carry the pump into the house is a far more efficient way than for the housewife to carry more than the weight of the pump each day continuously year after year.

Often the Cause.

"I can't understand why his motor should have exploded."

"He was driving it while lit up."

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