OTHER PEOPLES' EXPERIENCE

# WHAT ONE EXPERIMENTAL FARM FOUND OUT ABOUT POULTRY

(BY RAYMOND PEARLE, Ph. D.)

NOTE.—This is the second instalment of this very useful and interesting series of poultry articles describing methods and procedure at the Maine Agricultural Station. The first one appeared last week.

TREATMENT OF YOUNG CHICKS.

When the young chicks are 30 to 40 hours old they are carried in warm covered baskets to the brooders, and fifty or sixty are put under each hover, where the temperature is between 95 and 100 degrees Fahrenheit, during the first week, or 90 degrees F. duringthe second week; then it is gradually reduced according to the temperature ousted, care being taken not to drive the chicks out by two much heat, or cause them to crowd together under the hover because they are cold. They should flatten out separately when young, and a little later lie with their heads just at the edge of the fringe of the hover. They should never be allowed to huddle outside of the brooder. They huddle because they are cold, and they should be put under the hover to get warm, until they learn to go there of their own accord. Neither should they be allowed to stay under the hover too much, but in the daytime should be forced out into the cooler air where they gain strength. They ought not to be allowed to get more than a foot from the hover during the first two days; then a little furtheraway the fourth or fifth day, if the weather is not too cold. They must not get cold enough to huddle or cry but must come out from under the hover frequently.

The floor of the brooder is cleaned every day and kept well sprinkled with sharp, fine crushed rock, known in the market as "chicken-grit." The floor of the house is covered with clover leaves or with hay chaff from the feeding floor in the cattle barns.

FEEDING YOUNG CHICKENS.

The best method of feeding young chicks is at present a matter of some uncertainty, and it is doubtful if there ever will be general agreement as to the one best method. One condition, however, appears to be imperative, and that is that the young things be not allowed to overeat. A number of different methods of feeding young chickens have been used at the station in the east. The most useful of these methods follow.

Method I.—Infertile eggs are boiled for half an hour and then ground in an ordinary meat chopper, shells included, and mixed with about six times their bulk of rolled oats, by rubbing both together. This mixture is the feed for two or three days, until the chicks have learned how to eat. It is fed with chick grit, on the brooder floor, on the short cut clover or chaff. About the third day the chicks are fed a mixture of hard, fine, broken grains, as soon as they can see to eat in the morning. The mixture now used has the following composition:—

| | Parts by weight. |
|---|---|
| Cracked wheat | 15 |
| Pinhead oats (granulated oatmeal) | 10 |
| Fine screened cracked corn | 15 |
| Fine cracked peas | 3 |
| Broken rice | 2 |
| Chick grit | 5 |
| Fine charcoal, chick size | 2 |

It is fed on the litter, care being taken to limit the quantity, so they shall be hungry at 9 o'clock a.m.

Sharp grit, fine charcoal, and clean water are always before the chicks. At 9 o'clock the rolled oats and egg mixture is fed in tin plates with low rims. After they have had the feed before them five minutes the dishes are removed and they have nothing to lunch on. At 12.30 o'clock the hard-grain mixture is fed again, as in the morning, and at 4.30 of 5 o'clock they are fed all they will eat in half an hour of the rolled oats and egg mixture.

When they are about three weeks old the rolled oats and egg mixture is gradually displaced by a mixture having the following composition:

| | Parts by Weight. |
|---|---|
| Wheat bran (clean) | 2 |
| Corn meal | 4 |
| Middlings or "red dog" flour | 2 |
| Linseed meal | 1 |
| Screened beef scrap | 2 |

This mixture is moistened with water just enough so that it is not sticky, but will crumble when ahandful is squeezed and then released. The birds are developed far enough by this time so that the tin plates are discarded for light troughs with low sides. Young chicks like the moist mash better than that not moistened, and will eat more of it in a short time. There is no danger from the free use of the properly made mash twice a day, and since it is already ground the young birds can eat and digest more of it than when the feed is all coarse. This is a very important fact, and should be taken advantage of at the time when the young chicks are most susceptible to rapid growth, but the development must be moderate during the first few weeks. The digestive organs must be kept in normal condition by the partial use of hard feed, and the gizzard must not be deprived of its legitimate work and allowed to become weak by disuse.

By the time the chicks are five or six weeks old the small broken grains are discontinued and the two litter feeds are wholly screened cracked corn and whole wheat. Only good clean wheat that is not sour or musty should be used.

Method 2.—This is like Method 1, except that fine beef scrap is used instead of boiled eggs and the mash is not moistened.

Early in the morning the chicks are given the hard feed on the floor litter as described in Method 1. At 9 o'clock they are fed a mixture having the following composition:

| | Parts by Weight. |
|---|---|
| Rolled oats | 2 |
| Wheat bran | 2 |
| Corn meal | 2 |
| Linseed meal | 1 |
| Screened beef scrap | 1 |

This is given in the plates or troughs, and the dishes are removed after ten minutes' use.

At 12.30 the hard grains are fed again, and at 4.30 or 5 the dry meal mixture is given to them for half an hour and left until their bedtime. The meal being dry, the chicks could not eat it as readily as they can the egg and rolled oats or the moistened mash. For that reason it is left for them to feed upon longer than when molstened with the egg and water, but is never before them more than ten minutes at the 9 o'clock feeding time. The aim is to give them enough at each of the four meals so that their desire for food may be satisfied at the time, but to make sure that they have nothing left to lunch upon. It is desired to have their crops empty of feed before feeding them again.

What has been said so far is with reference to chicks that are hatched out in early spring, at a season of the year when impossible under the climatic conditions in Maine for them to ge[illegible]s for work.

Method 3.—This is like Method 2, except that the first mash for the young chicks has the following composition:—

| | Parts by Weight. |
|---|---|
| Wheat bran | 4 |
| Corn meal | 3½ |
| Linsed meal | ½ |
| Screened beef scrap | 2 |
| Alfalfa meal | 1 |

This mixture is scalded and the dry rolled oats are mixed with it in the proportion of two parts rolled oats to six parts of the mixture. The reason for mixing this way is that it has been found by experience that if rolled oats are mixed with the other materials of the mash before scalding there is a tendency for a mash to be soggy after it is wet. Mixing in the way here outlined has been found to improve the mash greatly.

This mash and the dry grains are fed as in Method 2, until the chicks are about three weeks old. From three Weeks on to six or eight weeks the composition of the mash is as follows.

| | Parts by Weight. |
|---|---|
| Wheat bran | 2 |
| Corn meal | 3 |
| Linseed meal | ½ |
| Daisy flour | 1 |
| Beef scrap | 1 |

Method 4—When warm weather comes and the later-hatched chicks are able to get out on the ground they find much to amuse them, and they work hard and are able to eat and digest more feed. Under these conditions the dry meal mixture described in Method 2 is kept constantly before them in troughs with good results. With two feeds a day of the broken grains in the litter they have hard feed enough to insure health, and they can safely peck away at the dry meal mixture—a mouthful or two at a time—when they seem to happen to think of it, and thrive. This method has been considerably used in feeding April and May hatched chicks.

Method 5—This consists in feeding the cracked corn, cracked wheat, pin-head oats, and millet seed in the litter four times a day, and keeping a trough of fine beef scrap within r each all the time. Sometimes commercial chuck feeds have been used i nstead of the cracked corn, wheat, oats and millet. By this system th e losses of birds have been small when the feeding has not been so liberal a s to clog the appetite. Much care is necessary in adjusting the quantity o f feed to the needs of the birds.

(To be Continued Next Week.)

DAIRYING

# SOME METHODS OF COW TESTING IN VARIOUS PLACES

Success of Plan Tried in Wisconsin Arouses Interest.

HOW EUROPE DOES IT.

(BY F. A. WOLL.)

The success of over thirty co-operative cow-testing associations in Wisconsin has aroused much interest in this plan of determining the actual milk production of cows. The first cow-testing association in this state was organized in Fond du Lac county two years ago by the Wisconsin Dairymen's Association.

The associations are of two kinds: the "one dollar cow plan" and the "fifty cents a cow plan." In the former the Dairymen's Association furnishes a man to do the work of weighing and testing the milk of the individual cows in the herd at an expense of one dollar a cow for the year. There are generally 26 members in each association, so that tests can be made once a month on each farm.

Factory Testing.—Under the second plan the farmers themselves weigh and sample the milk from their cows for one day each month and bring the samples to their creamery or cheese factory where they are tested by the operator at an expense of fifty cents a year a cow. The association in Wisconsin at present are generally organized on the fifty cent plan, and are all under the supervision of the State Dairymen's Association.

These associations originated in Sweden about eighteen years ago, and gradually spread throughout the Scandinavian and North European countries. Denmark alone now has 480 associations, and the net profits of Danish dairy farmers have been increased over 75 per cent., and in some cases more than 100 per cent.

Testing in Europe.—In the European countries the associations are organized by the farmers, who hire a young man to visit their herds one day each month and weigh, sample and test the milk of each cow for butter fat. The feed of each cow is also weighed, and an accurate account is kept of the production and feed consumption.

The European testing associations are aided by a small Government grant for each cow, but are otherwise private co-operative enterprise managed by the farmers themselves. Michigan was a pioneer in taking up this work in America, and at the present time such associations are in operation in most states where dairying is an important industry, and also in Canada.

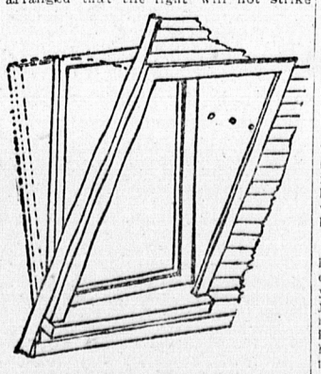
The Wisconsin College of Agriculture has charge of the official tests of pure-bred cows in the state which have been conducted for breeders of live stock since 1893. Six or eight men are steadily employed in this work. The work for the year 1907-8 is fully described in a recent bulletin of the Wisconsin experiment station.

* * *

LIGHTING AND VENTILATING

Mumford and Mayo, discussing the lighting and ventilating of stables in the Cyclopedia of American Agriculture, lately issued by the Macmillan company of New York, make the following suggestions:

Stables should be well lighted and so arranged that the light will not strike



SHERRINGHAM WINDOW FROM OUTSIDE.

the animals directly in the eyes. Light is best admitted from above and behind the animal. An excellent method of admitting light is by means of the Sherringham window shown in the accompanying illustration. The window is hinged at the bottom and opens inward at the top, and serves for ventilation as well as light. Abundance of light, for stables is important hygienically, as direct sunlight destroys many germs, is a good drying agent, and adds a cheerfulness that is greatly to be desired.

White Spot on Eye.—Horse six years old hurt its eye last fall and left a white spot on it. Is there any cure for it?—J.A.U. A five per cent. solution of muriate of ammonia applied once daily with a small camel hair brush, proves satisfactory.

SWINE

# FULL GROWN PEAS MAKE BEST FEED FOR YOUNG PIGS

Young Vines Appetizing But Not Nutritious.

HEAT HARD ON HOGS.

(BY D. A. GAUMNITZ.)

Pasturing Peas with Hogs.—Peas in green form have been used as hog feed in nearly every conceivable age of growth, from the time they are a few inches high until mature. Consensu of opinion now seems to indicate that at maturity peas are more profitable for hog feed than at any other stage. It is well known that young green pea vines are appetizing to young pigs and develop in them capacity. For such a purpose they may be desirable but they cannot yield the greatest amount of nutrients which is the chief factor of consideration.

There are many hog raisers that have grown peas for green feed for years past, but more recently are growing them for the grain they produce. When ripe the crop is harvested quickly by turning in the hogs. While peas do not furnish the amount of food that corn will per acre, the crop is a most excellent one to turn into just previous to turning into a corn field. In years such as this when grain feeds are expensive and many are caught short, one cannot overestimate the value of an early feed such as peas, coming to maturity five weeks or more before corn ripens. This year there is a strong temptation to turn the hogs in when the peas are still green. While this can be done, it is not at all economical.

Peas should not be depended upon as the only feed. Young pigs should be given other grain feeds at the same time. There may be exceptions to giving additional feeds when the hogs to be turned in are old enough to be fattened. The hogs should not be turned into more peas than can be "cleaned up" in a couple of weeks. The peas shell easily and unless the hogs are made to do good, clean work peas are likely to be lost. When confined to a limited area this is not noticeable.

Hot Days Hard on Hogs.—Many valuable sows have already been lost this year as a result of oppressive heat. Yet in most cases it was carelessness about providing suitable shelter from the sun that was responsible for these deaths. A big fat sow can stand very little heat, and will succumb very soon if unduly exposed to it. Unless trees are already there, which is not so in the majority of cases, shade should be provided in the pasture.

Many hog men try to make the little individual hog houses answer for this purpose, but experience has shown them to be unsatisfactory. They are small and giant-footed, and extremely hot. There is no chance for air to circulate through them at all, and sows very often die in them.

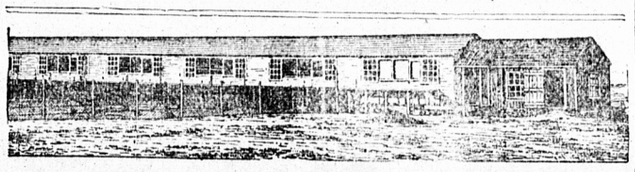
A great deal better shelter is simply a roof either of boards or straw, supported on poles or two-by-fours, two or three feet long. The breeze always draws under such a structure and it is nice and cool there. If there is a small boy on the place who can sprinkle a little water under this shelter, its evaporation will make the place still cooler and more comfortable. It takes very little time to put up such a shelter, and for reasons both of humanity and profit it should be built.

A good wallow is a great comfort to hogs on hot days, but many wallows are so filthy that they are breeding places of all sorts of germs and diseases. A wallow made by pouring clean water on clean dirt is the best sort to have.

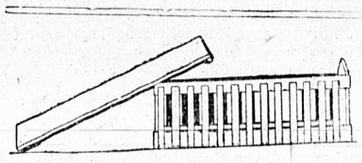
Hogs will be affected enough by the heat if everything possible is done to make life pleasant and comfortable for them, and every farmer owes it to himself as well as to his hogs to provide a nice cool shelter and clean wallow for them.

A Good Job for a Wet Day.—According to all reports more farmers than ever are going to hog off corn this year. This speaks well for the good judgment of these men and gives promise of all profits possible, since there is no cheaper or better way to feed hogs than to turn them into the corn fields in the fall and let them do their own harvesting. In many cases the fields to be hogged off are not as yet fenced. There is no better time to do this than on days when it is too wet to work in the hay or grain fields. There is always plenty to do in the fall without having to stop and fence a corn field, and oftentimes when the corn is ready the hogs cannot be turned into it simply because the field is not enclosed. This is bad economy.

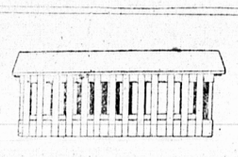
Free the Hogs and Barns of Lice.—Hogs have enough to battle with during the hot humid days without being irritated with lice crawling all over them. Yet there are many old sows, also many tender skinned little pigs, that are carrying around dozens of these annoying vermin even yet. Such pigs ought to be dipped and cleaned up at once. And what is more, the barns also should be thoroughly cleaned. Many farmers very religiously dip their hogs every spring but never disinfect the barns; then they wonder where their sows and pigs get lice. It is really almost useless to dip hogs unless the barns are at the same time thoroughly sprayed with strong dip, as the barns are often as badly infested as the hogs. Hogs that have a good wallow can often rid themselves of lice, but there is no chance of the barn ridding itself. So dip the hogs and pigs if they need it, but at any rate spray and clean up the lousy barn.



The latest curtain front poultry house.



Chicken feeding trough with cover removed.



Chicken feeding trough accessible from both sides with cover on.

THE CROPS

# SOME ENGLISH OPINIONS ON THE WORLD'S CROPS

Only Record Crop Can Bring Down Prices, Says the Statist.

APPLES, FRUIT AND HAY.

(BY J. M. McARROW.)

A late number of the London Statist, one of the world's recognized market and financial authorities, makes the following comments of the world's wheat situation:

The world's reserve stocks of what are so obviously low that nothing short of a superabundant crop in 1909-10 could restore the equilibrium and bring about the former normal level of 30s to 35s per quarter (89 cents to $1 per bushel). Of this superabundance there are no present signs; rather does it appear that the world's wheat production in the coming season is destined to be a moderate one.

In Russia and Roumania there has been lately much anxiety owing to the prolonged drouth, but this, fortunately, has been relieved during the past week by beneficial rains all over the country; Russia may, therefore, still reap good average crops; but in Roumania such a result is less likely, because the area sown shows a marked decrease compared with last year.

In Hungary, where wheat is now so scarce as to command 55s per quarter at Budapest, the Minister of Agriculture reports very unfavorably of the condition and prospects of the wheat crop on May 15, except in the southern parts.

In Germany also the official report for May 15 has seldom been so unfavorable as it is this year, and a smaller crop than last year is now regarded as inevitable.

In France Beneficial rains have fallen this week, and the outlook has been improved thereby, but the condition of the crop is altogether too irregular to warrant the hope of a big crop such as was reaped in 1907, viz., 47,000,000 quarters, although a larger crop than last year, whose yield was only 39,000,000 quarters, is expected. If France should happen to have another poor crop this year she would become at once an importer on a large scale, because her stocks of home-grown wheat have seldom been so small as they will be when the new crop comes into play.

Italy and Spain both look for good crops now that plenty of rain has fallen and genial weather is being enjoyed.

In England the crop is backward, but in the opinion of experts it has the making of a big yield if all should go well from now to harvest.

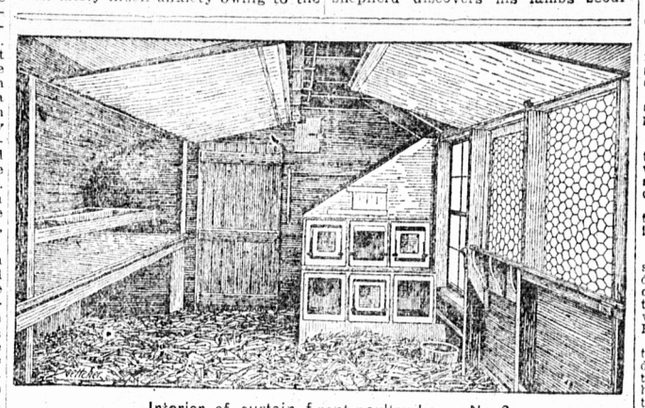
In America the winter wheat crop area is about two million acres less than last yeär, and a smaller yield is certain; but the spring wheat crop may easily compensate largely for the loss in winter wheat.

The Indian wheat crop, which enters partly into the present season, is now moving freely, and it is not too much to say that this crop, although not so large as was expected, has prevented a very serious further advance in prices. Last year we received little or no wheat from India, because of the crop failure there; a similar failure this year would have meant probably 60s per quarter.

The report of the Department of Agriculture on the fruit crop for July is not so encouraging as was the June report. The drouth of the early part of the month had its effect in reducing the crop materially. However, the latter portion of the month have somewhat revived the hopes of the growers and a crop above the average is looked for. Apples will be a light to medium crop, but the winter varieties promise to be of better quality than usual. The pear harvest will be light, with the possible exception of Nova Scotia, where a full crop is expected. Plums, peaches, cherries and grapes will give a medium to full yield, except in British Columbia. Tomatoes promise an average crop in Ontario, medium in British Columbia, while a full crop is expected in the Maritime Provinces. The strawberry harvest was shortened by the dry weather, but there is now being harvested a full crop of the other small fruits. With the possible exception of the aphis or plant louse, the insects have been very good to the fruit grower this year. The codling moth has been noticeable and also the blister mite but the damage has not been very great. These may be destroyed by an application of kerosene [illegible]on when the foliage is out. This will also kill the aphis. In Great Britain, United States, Germany and France, the apple crop will be light to medium, while the other fruits will give a medium to full crop.

NEWFOUNDLAND HAY HARVEST.

Advices to the Trade and Commerce Department from the Canadian trade agent in Newfoundland state the hay harvest in that colony is an excellent one.



Interior of curtain front poultry house No. 2.

SHEEP

# SCOURING LAMBS SOMETIMES MEANS STOMACH TROUBLE

Change of Pastures Best Remedy For Worms in the Flock.

THE FEED SUPPLY.

(BY D. A. GAUMINTZ.)

A good many lambs are seen to be scouring at this season of the year. In some cases this is due to the green succulent pasture on which they have been feeding. In other cases, however ,it is the first indication of the presence of that dread enemy of the lamb, the stomach worm. One of the worst features of the stomach worm is that it can often be present and carrying on its deadly work in the lamb's system without there being any very distinct indication of it outwardly. Scours, however, is one symptom that often attends the presence of the worm, and as soon as the shepherd discovers his lambs scouring badly it would be better to begin to look out for worms. Other symptoms of worms are pale skin and membranes, general lack of thrifht, an inclination to move about slowly, and often a stiffness in one or more legs.

Lambs become infected from grazing behind their mothers on old infested pastures, or from drinking polluted water. Where they are found to be affected the thing to do is to dose the whole flock, ewes and all, and then get them on to clean, fresh pasture as soon as possible. There is nothing gained by dosing them and leaving them on the same pasture, for they will take the worms or worm embryos, which are clinging to the grass blades back into their systems just as fast or faster than they will get them out. Frequent change of pasture cannot be too strongly emphasized in the struggle against worms.

One of the most largely used medicinal agents for overcoming stomach worms is an emulsion of turpentine in milk or oil. An ounce of turpentine to a pint of milk, or to two ounces of raw linseed oil makes an emulsion of the proper strength. Of the milk emulsion, two to four ounces, depending upon the size of the lamb, should be given; of the oil emulsion, from one-half to one ounce. The emulsion with either milk or oil should be freshly prepared and well shaken up prior to using. Usually sheep will be pretty well cleaned up after this dose has been administered for three days, but it is safer to dose them again after a week or two has passed. It may as well be admitted that there is no complete cure for lambs badly infected, but under proper treatment the ravages can be allayed.

The doom of thrifty growth is sounded for lambs when they get stomach worms. They simply cannot do well when these parasites are after them, so the thing to do is to clean them up just as soon and as well as possible ,then get them on to clean, fresh pasture, where they will soon pick up again.

SHORT PASTURES.

A few weeks will find pasture crops exceedingly short and sheep limited to them for food supply will come to a standstill. Rain has been quite plentiful in nearly every section; pastures have grown well until recently, but such conditions do not maintain and other provisions must be made early. It is natural to let matters of this nature drift until it is too late. Management at such times is just what determines success or failure in many cases. It is the same in growing lambs for market or maintaining breedings ewes.

On every farm some means of supplying feed to keep sheep growing is possible, and rather than be non-progressive, steps in that direction should be taken. It would be much better to feed dry, freshly-cut clover hay than to have all growth in sheep cease. There are ways out of the difficulty that are more husbandlike, such as supplying larger pasture areas of whd lands, meadows second growth clover, or even fields that have been early out for grain. Weeds as well as all other form of forage is gathered and that helps to tide over the ewes and lambs until the growing season in the fall when an abundance of rape in the fields and aftermaths in the meadows is at hand.

It is not alone for the benefit of the lambs that pasture should be supplied, but for the ewes as well. It is well known that ewes if put into winter quarters in a poor, weakly condition yield a small quantity of poor wool. Besides it costs extra feed to replace the weight that has been lost by poor feeding in the summer. The feeds that are picked up by sheep are much cheaper than cured feeds that must be furnished in the winter. This fact should be recognized and the cheap feed supplied and regular uniform growth obtained in the lambs and old breeding sheep.

As pointed out by the author of one of the farmers' institute lectures issued by the Department of Agriculture, in the feeding of poultry on the farm it is neither practicable nor desirable to compound elaborate rations. Where the fowls have the liberty of the fields the question of feeding is very much simplified; they will there pick up a large proportion of their food.

# ANSWERS TO CORRESPONDENTS

NOTE.—Not more than one question from one correspondent can be considered at one time. Questions should be specific, clear and concise, and should be addressed to the Editor of the Agricultural Department of this paper. Any person requiring answer by mail must enclose stamped envelope.—Editor.

Mare Does Not Breed.—W. L. B.—I have a six-year-old mare in perfect health. She comes in heat but cannot be got with foal. Can this be remedied?"
Ans.—Try impregnator.

Wind Puffs.—J. McG.—"What can be done for colt with wind puffs on hocks?"
Ans.—Apply tinct. iodine of extra strength once daily for a number of weeks.

Will Twin Calves Breed?—H. H.—"Will twin calves at maturity breed?"
Ans.—Twin calves of same sex usually breed, but when of opposite sex they sometimes do not.

Sore Eyes.—T. H.—"Two cows have sore eyes with swollen lids. There is some discharge. What should be done?"
Ans.—Apply powdered boracic acid once daily to the eyes.

Cough, horse.—C. M.—"A horse, 15 years old, has had had cough fo two years. He coughs up chunks of matter and he now breathes with difficulty."
Ans.—Give oil of eucalyptus in teaspoon doses night and morning and let him pick all the grass he wants.

Steer Dies.—Subscriber.—"I lately lost a steer that was apparently in good condition. He breathed hard and lay down constantly in water. Was sick twelve hours. What ailed him?"
Ans.—Symptoms insufficient to make diagnosis without seeing animal.

Mare Ailing.—C. B.—"Mare is very stiff from effects of foaling. I have her on grass, but she will not eat. What can be done?"
Ans.—Wash out uterus once daily with about a gallon of warm lysol, solution, 1 per cent. Use fountain syringe.

Tuberculosis.—E. W.—"I have a cow that has great difficulty in breathing in warm weather, and seems to choke and show distress in her chest. Is this tuberculosis?"
Ans.—Probably lung trouble; may be tuberculosis. Report to your state veterinarian.

J. K. P. Davis.—"I have a cow, of Holstein stock, that has a large cake in udder. She has her second calf, is a good cow; her udder has been in this condition ever since the calf was two or three weeks old. It is now five weeks old. Please tell me what to do.
Ans.—The best cows are specially likely to be troubled with their udders. This disordered condition of the udder is likely to be much helped by the sucking of a hungry calf, and the kneading it gives the udder with its nose. The gland needs to be stripped clean twice daily, and at each milking there needs to be active rubbing with the palms of the hands, using lard or camphorated ointment. Keep out of drafts and milk regularly.

Subscriber.—"I have a horse seven years old that has a bad cough. He coughs mostly when eating, but never coughs up anything. Thanking you in advance for the information.
Ans.—Such a disorder is very apt to be a symptom and not a cause; ascertain the cause, and if possible, remove it and the cough will cease. Indigestion and worms often cause horses to cough. If the action is from worms the kind of worm needs to be ascertained. A suitable vermifuge and medicine given to clean out the system. No person can ascertain the particulars here required as a person on the spot. We point out the course to be taken.

A subscriber writes: "I have a cow with a defective teat. A few days ago she jumped a plank fence, a little more than three feet high, and tore the skin off on one side of the teat about one-half size of a dime, making a gash about an inch long on the other side. Here I began at once to get hard to milk, and the milk would come in a very small stream. I am now using a dilatator and milking tube, but I can get no milk."
It is quite difficult to tell without seeing it to what extent this udder has been injured; but it is certain that the wise course to pursue is not to give it much to do until it gets all right again. If there is any foreign object in the udder it must surely be let out; otherwise the udder will not get well. Milk regularly and get every drop out. Do not give milk-producing food. Use the usual plan for barley wounds, and make sure that the bowels are in good working order and so kept. Give plenty of good, pure air.

## Damage Very Light.

Thomas Atcheson, general grain agent of the Canadian Pacific Railway Company, states that since the beginning of the season he has kept full report of all damage to growing grain, and the amount covering the three large provinces of Manitoba, Alberta and Saskatchewan will not reach more than 1,000,000 bushels. This is less than one per cent. of the expected yield, estimating 1909 wheat crop at 120,000,000 bushels, which is considered a low estimate. One per cent. damage is considered very light in comparison with other years. "Of course," said Mr. Atcheson, "the business communities generally will not feel such a slight loss. At specific points where the most damage has been done there will be a slight depression among the business men, but apart from the local points business men may so far rest easy."

## The Apple Crop.

An apple crop in the United States slightly in excess of that of ayear ago, and fifty per cent. larger in Canada, is the estimate made by Secretary Rothwell before the International Apple Shippers' Association. The quality of the crop is rated poor to good. The association elected these officers: President, W. L. Wagner, Chicago; vice-president, Jno. B. Frey, Rochester; secretary, C. P. Rothwell, Martinsburg, W.Va.; treasurer, W. M. French, New York. Next year's convention will be held at Niagara Falls.

## Some Facts About Milk.

Some idea of the importance of milk as human food may be gained from the fact that about one-sixth of the total food of the average family is furnished by it and its products.

Of the various mammals whose milk is used for food in different parts of the world may be mentioned the goat in the hilly districts of Europe, the buffalo in India, the llama in South America, the camel in desert countries, and the mare on the steppes of Russia and Central Asia. Sheep's milk is used in some countries for making cheese and in other ways, and the milk of reindeers is commonly used as food in the arctic regions. With us the milk of the cow so far surpasses all other kinds in importance that unless otherwise specified the word milk is taken to refer to cow's milk only.

Following are the advantages of colony houses for poultry, as reported by poultrymen of the Oregon Agricultural College:

1. That it avoids largely the danger from soil contamination, or "ground poisoning," which will almost certainly result where fowls are confined year after year on the same ground.
2. It obviates the necessity of building fences where large numbers are kept.
3. It simplifies feeding, inasmuch as the fowls, having fresh ground to range over, secure necessary food with which the farmer does not furnish them, either through neglect or inability to secure it.

# RELIABLE AGRICULTURAL ITEMS FOR PROVINCIAL FARMERS