THE COST OF DISTRIBUTION FROM PRODUCER TO CONSUMER

Referring to the vital and fruitful subject of cost of distribution of products from producer to consumer, it seems pertinent to suggest that this cost bears most lightly upon localities which make a specialty of producing one sort of product.

The reason for this is almost self-evident. Specialized production results in high quality of product. This has been proven true everywhere and in all ages. Again, specialized production results in a large quantity of well handled and superior product in one locality. A large quantity of a superior product of any sort concentrated in one place or locality will attract buyers of large quantities of high class products.

When the buyer comes to the seller the last has something to say about the price he sells for. When the seller carries his product to the buyer the last is the sole arbiter of price, and the seller is as putty in the buyer's hands. If such a self-evident proposition needed proof the proof could be easily piled mountain high.

And this principle may be applied to all sorts of products; not only to berries and other fruits, to celery, beans and other now staple products, to cattle, horses, and other live stock, but to grains, the most staple and extensively grown products of farms. It also applies to manufactured products as wel as to those of fields and gardens.

The world's largest buyers of embroideries go to St. Gall, Switzerland, to buy, for that locality has been devoted to this special industry so long that the best goods at the lowest prices are found there. Hosiery buyers go to Chemnitz, Germany, for the same reasons. For machine made laces and other trimmings Nottingham, England, has been the Mecca for generations. For buckskin, dogskin and similar gloves and mittens all American buyers of large quantities go to the Gloversville, N.Y., district, and so examples might be named by scores and hundreds, examples which could be followed by farmers to their great advantage.

Suppose the farmers of some locality in Manitoba would combine and resolve to grow and deliver to their own local warehouse a superior quality of the hard wheat for which this great region is peculiarly adapted? A locality in which every farmer will strive to excel in preparation of soil, in selection of seed, in care in harvesting and preparing for market; where no farmer will be ambitious to grow many acres of wheat, but every farmer will strive to beat his neighbor in quantity and quality of wheat grown to the acre? How long does any one think it will be before that locality will be sought out and invaded by buyers as are St. Gall, Chemnitz, Nottingham and Gloversville? And the buyers will compete sharply with each other for possession of such wheat.

Farmers who are enabled to sell wheat in this way will not be disturbed by grades, weights, commissions, terminal charges, dockage, etc., in far off markets. The buying millers will look after such things, and can do it better than farmers can. In fact but few of these things will need looking after, for the wheat will pass in unbroken bulk from the grower's warehouse to the buyer's mill, getting wheat-grower and bread-eater as closely together as possible.

It needs no national organization to prosecute such enterprises. In truth, national organizations would be worse than useless to take the initiative in such work. The enterprises may be undertaken and extended until they become a national characteristic by reason of their universality; but each locality must do its own work in its own way, adapting itself and its line of production to its environment as to soil, climate, market demands or facilities, and so on.

Probably the best fruits, after all, of endeavor of this kind will be the lesson in self help it will teach, making men less dependent upon laws or other outside influences and more dependent upon themselves.

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From a nutritive point of view, milk occupies a high position as it is a balanced food, supplying all of the nutrients, proteids, fats and carbonhydrates, in proportion to the requirements of the body. While milk is composed largely of water—about 87 per cent.—the solids are made up of a mechanical mixture, approximately 25 per cent. each of fat and casein and 40 per cent. of milk sugar; the remaining 10 per cent. being composed of ash and mineral matter, albumin and other compounds in small amounts. The value of milk is not dependent solely upon the amount of fat or cream which it contains, as the milk proteids are extremely valuable for functional purposes of the body. Milk differs materially in composition, being influenced principally by the individuality of the cows and the care which they receive. Some milks contain as high as 5 1-2 per cent. of fat and more, and some as low as 2.5 per cent.

While it is important that milk should have a good fat content, it is equally important that it should be sound from a sanitary point of view. Many bovine and human diseases are so similar that they are either capable of being communicated directly from animals to humans, or the conditions which favor the disease in the one also favor it in the other. In the case of tuberculosis, while it is not yet definitely known whether bovine and human tuberculosis are identical, the milk from a tubercular animal is not suitable food, because the toxins are chemical products produced by the tuberculous organism and present in the milk, will, when such milk is used as food, produce an action in the human body similar to that of the chemical products from human tuberculosis. It is to be hoped that human and bovine tuberculosis will not prove to be absolutely identical diseases, but even in this case it would not render milk from tubercular animals a safe food for human consumption, because the toxins or chemical, products of the tubercular organisms would still be present in the milk and act as an irritant in the body.

Too much attention cannot be given to the production of milk of high sanitary quality. This necessitates clean, ventilated stables, best of care of the animals, good quality of food and water, clean dairy utensils, and sanitary ways of handling the milk. Since it is estimated that three-fifths of all the milk that is produced is used directly for human consumption, the importance of having milk of high sanitary condition is apparent. Not only should the animals be healthy and clean, but this should be true also of the milkers and all who take part in the care of the animals and the handling of the milk. Typhoid fever, scarlet fever and forms of grippe and of intestinal disorders are frequently due to contamination of milk by unclean and unhealthy humans.

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Did you ever see a monarch of the woods lie dead and dry where it fell? Did you ever thump its side and hear a sound that spoke of emptiness within? That is dry rot.

Did you ever know a man who years ago began a Rip Van Winkle sleep—not dead, but not progressing a bit? Did you ever sound him with a few questions on up-to-date topics and hear his hollow mockery of "book larnin'?" That is dry rot.

Did you ever hear of a man who can turn a deaf ear to the pleadings of a wayward girl for mercy and forgiveness and say, "Begone! I told you never to darken my door again?" His better self has long been dead. His heart was eaten out by dry rot.

Has any married couple in your knowledge, who, after thirty years of life together, sued for divorce on the grounds of incompatibility? People in astonishment say, "What's the matter?" The children have been occupying a place in each heart, they have grown and gone, and the old couple has failed to keep alive the love of younger days. The home has been a hollow mockery for a long time, kept only for the sake of appearances and for the sake of the children. Home happiness has been killed by dry rot.

Friends, the orchard and forest are not the only places where you see the effects of that quiet, unobserved but killing disease, dry rot. It creeps into the head, the heart, the home, the state and the nation.

Keep the mind and heart growing. Keep abreast of the times by reading. Keep the affections fresh and attractive as in the courting days. Keep in sympathy with the children. This will prevent dry rot.

AGRICULTURE

DEEP TILLAGE GIVES THE PLANTS PLENTY OF ROOM

Plants Like Animals Need Food and Drink or They Sicken and Die.

VALUE OF EARLY PLANTING.

(BY A. G. McCALL.)

Tillage includes both the preparation before planting and the working of the soil after the crop is planted, while cultivation includes only the stirring of the soil after the crop has been planted.

For most soils it is best to practice deep tillage in the preparation of the seed bed and shallow cultivation after the crop is planted.

Deep tillage gives the plants a large amount of room in which to send out their roots in search of plant food, allows the soil to drink in the rainfall more freely, and permits the air to enter the soil and help in the preparation of plant food. Shallow cultivation checks the rapid loss of water from the soil by forming a loose blanket over its surface, kills weeds and helps to admit air to the surface layer of soil.

Plants, like animals, must have food and drink or they soon sicken and die. Animals can move about from place to place to secure their food, but plants must get their food and water by sending their roots into the soil. The tiny roots which spread out through the soil are busy all of the time taking up water from the soil for the use of the stalk and leaves above. The water, as it goes into the plant through the roots, carries with the plant food which it has dissolved out of the little soil particles.

Place a lump of salt in a glass of water and stir for a few minutes. The salt disappears, and you will find that the water has a salty taste. The salt has dissolved in the water, and we say that the salt is in solution in the water. All of the food which comes from the soil must be in solution before it can be used by the plant. The water that goes in through the roots passes out through the leaves into the air and leaves the plant food behind to build up the tissues of the plant.

If the soil is hard and lumpy, the little roots cannot penetrate far into it, it must feed near the surface. If we have a deep, mellow seed bed, the roots are encouraged to go deep and gather plant food from a large amount of soil. The plant food in hard, lumpy ground is not easily dissolved. Stirring the soil, and breaking up the clods brings the water into contact with more soil surface and hastens the solution of the plant food.

The depth to which the soil should be prepared depends upon the depth to which the plant roots will penetrate. Wheat, oats, and other small grains are shallow rooted and do not need so deep a seed bed as corn or root crops.

Soils that have always been ploughed shallow should be deepened gradually by setting the plough to go about one inch deeper each season until a depth of eight or nine inches has been reached. If this deepening is not done gradually, the soil will be injured and poor crops will result for several seasons.

Planting should be done as early in the season as possible. I prefer the check system, 3 1-2 feet apart, with two good kernels to each hill, always testing each individual ear for strong germination. With two stalks in the hill, 3 1-2 feet each way, and each stalk producing one ear of corn, we are growing one hundred bushels per acre. The best cultivation is given before the corn is planted, or in other words, a properly prepared seed bed makes thorough cultivation possible. The method of cultivation depends altogether on the condition of the soil and the weather. A very good way is to follow with a spike tooth harrow about two or three days after the corn has been planted, but never harrow as the corn shoot is nearing the surface of the ground, or until it begins to blade. Corn may be harrowed with small spikes satisfactorily while it is four or five inches high.

Cultivation should begin early, always with a rider; life is too short to walk. Cultivate close and deep the first time and gradually go shallower and farther away from the plant when it is rooting. After the corn is too tall for the riding cultivator I continue the cultivation by dragging a mower wheel of the right width between the rows. Have the blacksmith set a lot of small spike teeth on the mower wheel; they should project 1 1-2 inches below the wheel, and at a backward slant of 45 degrees; omit the teeth from the rim of the wheel near the rows. This cultivation may be followed so long as it continues to rain or the ground is inclined to crack open.

ODDS AND ENDS.

No farmer can hope to prosper who neglects his pastures or meadows.

Some farm methods need revision more than does the tariff.

Red clover sod land is good for alfalfa. In some cases this land may be disked thoroughly and alfalfa sown in the spring. Ploughing and thorough preparation will pay for the extra trouble.

The annual loss caused American farmers by insects and rodents is estimated at $800,000,000. That's a pretty sizable bill, but it could be greatly reduced by protecting and encouraging our friends, the birds.

Farming is the cleanest, most honest, remunerative vocation on earth, and the people who fail to "make good" have only themselves to blame. Mother nature always pays 100 cents on the dollar when her votaries fill their part of the contract.

Three vital points in alfalfa culture are: Drainage, sweet soil and the alfalfa bacteria. The first must be supplied in the land selected, the second may be secured by using lime to correct acidity, and the last usually is present, but may be added in soil from an old alfalfa field.

DAIRYING

RAISING CALVES ON SKIMMED MILK MEANS ATTENTION

With Proper Care the Results May be Eminently Satisfactory.

BEST TIME FOR GRAIN.

(BY C. V. GREGORY.)

Can calves be raised successfully upon skim-milk as upon whole milk from the cow? This is a question which many farmers are asking themselves, more specially since land has become so high-priced that it is no longer profitable to keep a cow a year for the sole purpose of raising a calf.

Success in raising skim-milk calves means more work, and the more attention to details, but with proper care the results will be eminently satisfactory. In the first place it must be remembered that in taking out from three to five per cent. of the fat the feeding value of the milk is necessarily greatly decreased, and to obtain good results the missing fat must be replaced by some other food.

For at least two weeks the calf should be fed new milk, as at this age he is unable to digest grain, and his future development will depend largely upon the start he gets while he is little. At the end of two weeks the new milk may be very gradually replaced by skim-milk, but this should be done slowly, so that it will be about a week later before the change is complete. The skim-milk should always be sweet and the pail in which it is fed scalded occasionally as a precaution against scours. If a separator is not used the milk should be warmed to a temperature of at least ninety degrees before feeding, but great care should be taken not to scald it.

Many calf feeders attempt to replace the butter-fat in the milk by adding meal or one kind or another, but no safer plant of checking the calf's development could be followed. Almost without exception the calves that have taken grain mixed with their feed will scour and become weak and unthrifty.

There is one feed, however, which may be added to the milk with advantage and that is blood flour. A heaping teaspoon placed in the milk at each feed and stirred up well will absorb very persistent scours, and will give to the calf a thrift and growthiness that it would not otherwise have. The cost is insignificant and the benefits can not be too strongly emphasized.

The best time to feed grain is just after the milk has been fed. If a little ground corn and oats are placed within the calf's reach at this time he will soon learn to eat well, instead of sucking the other calves' ears as would otherwise be the case. There is no danger that the calf will eat enough grain to hurt him. In the case of heifers that are intended for cows, these may be fed at least a fourth corn, the other three-fourths consisting of oats and bran. Calves which are to be turned into beef may receive at least half corn.

For the roughage part of the ration nothing can take the place of clover or alfalfa hay. Special effort should be made to raise enough hay of this kind to suply the calves.

What has been said in regard to the amount of grain to feed must not be taken to apply to the milk as well. Here there is a very great danger of overfeeding. Do not think that because the milk is weak you must feed more of it. Excessive milk feeding makes pot-bellied, rough-haired, unthrifty calves. Their powers of digestion are impaired, and consequently they will not do as well. Eight quarts of milk a day makes a very good feed, and more than twelve quarts should never be used.

Handled in this way the skim-milk calf a year old can scarcely be distinguished from his whole-milk brothers, but when the year's accounts are balanced the credit side will show his real value.

TO DRIVE POSTS IN HARD GROUND.

For setting driven posts in dry ground the following plan has been found very satisfactory: Take the pointed end of a crowbar and open up a hole as deep as desired, or as can easily be made; do this with 20-30 postholes and let a boy follow along fill the opening with water. Go along with the crowbar the second, and if need be, the third time, flushing the holes after each operation. By the time one has prepared a dozen or twenty holes the first will be soaked sufficiently to take the post. It is surprising how easily it will be set, and what looks at first sight like puttering around really makes a considerable saving of time.

SWINE

GOOD FENCES VALUABLE TO HOG RAISERS

Young Pigs Especially Should be Kept in Check From the First.

DO NOT SET POSTS FAR APART.

(BY A. GAUMINTZ.)

Many farmers experience so much trouble every year in keeping hogs within bounds during the pasture season that they are almost ready to quit the business entirely. Nothing could be much more provoking than to have to stop in the midst of some very pressing task to gather in a bunch of obstinate and wayward hogs. It is in reality enough to try the patience of a saint. Yet this is not essentially a daily, weekly or even monthly part of the hog business, as the experience of many skilled hogmen will affirm. With a little care and precaution "the pigs in the corn" (except in the fall, when they should be found there) will be a rare occurrence.

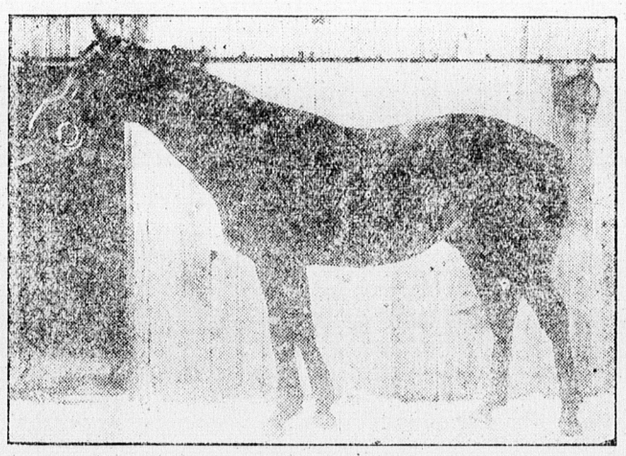
It is not usually the old hogs that cause the trouble, but rather the young pigs. Once let them get the notion of crawling under or through the fence, and it is next to impossible ever to break them of it. Very particular precautions should therefore be taken to keep young pigs in from the first, and they should never be turned into the pasture until the fence has been made ready for them.

A great many farmers make the mistake of putting up a poor fence in the first place. It does not pay to set posts far apart, to use barbed wire, or woven wire, with big loose meshes, nor indeed to only half stretch such wire. The labor and delay caused in pursuing escaped pigs during one season alone would entirely discount any saving in first cost of such construction. The hog fence should have posts set not farther than a rod apart, unless stays are placed between, and should be made of a 26-inch close meshed woven wire drawn tightly and well secured on these posts. A barbed wire at the base of such a fence will go a long way toward discouraging pigs in the burrowing idea.

Wires often sag over winter, posts rot out, or the fence becomes weak in some other way. All such laxity the pig very readily discovers and utilizes; and the sensible farmer will not turn his pigs into pasture until he has put upon his fence whatever repairs are necessary to again make it firm and tight.

It will be found that pigs stay where they belong much better when they are not confined in too small an area. It is an apparent saving in cost of fence that prompts some farmers to limit pigs to a small area—a belief that pigs trample down and waste pasture that causes others to do so. Neither case is borne out by the facts. Pigs get more exercise, do better, are more contented, and stay where they belong much better if given a little breathing space.

Pigs enclosed within a tight, strong, closely woven wire fence, and not limited to too small an area, will cause little trouble by getting out. Put in a few hours repairing fences now, and save yourself much time and patience next summer, when your crops demand attention.



ROSEMOUNT.

The Canadian National Bureau of Breeding stallion Rosemount, sire Hastings; dam Rosemary, placed for service with Mr. Samuel Nesbitt, Petite Cote, Que.

THE CAREFUL COWMAN.

It is essential for young animals to have daily exercise.

Get the milk through the separator as quickly as possible after it leaves the cow.

Just because a cow is from good stock and ought to be good is no excuse for keeping her.

The best preventive of garget is clean, careful milking and a vigorous rubbing of the affected part of the udder at the first sign of trouble.

Buy a good-sized separator, a size larger than you think you need. The bigger machine will skim the milk enough quicker than a small machine to soon pay the extra cost in time saved.

Many dairymen will tell you how many thickneses of cloth they strain their milk through. They would better tell you how careful they are to keep the dirt out.

Careless people never have any luck raising calves by hand. The calves are not fed regularly, the milk is often too cold, sometimes too much, sometimes not enough. The pen is not kept clean or dry. If several calves are kept in a pen together, they are apt to get the habit of sucking each other's ears, a bad practice in cold weather especially. This can be avoided by giving them hay or grain feed just after they drink.

POULTRY

SOME POINTS ON MATTER OF RAISING CHICKS

Many Little Things That Have to be Attended to for Success.

HOW THEY SHOULD BE FED.

(BY IDA E. TILSON.)

If your hens are debilitated by the past cold winter's confinement, and by the present changeable weather, it will help tone them to feed raw chopped onions, roasted corn, skim milk, and a few such hen luxuries. One friend who keeps ducks as well as hens, ingeniously nailed a low board across the henhouse door. The hens can jump over, but the ducks cannot get in to rob and starve the hens. If you cannot visit your flock several times a day, keep plenty of grain scattered in litter, so the hens will have employment scratching it out, and remember they need, all through spring, one-third the amount of winter's feeding. Grass is wholesome, but "thin" food. The biddies cannot take the whole care of themselves as soon as it comes, before bugs and seeds are included.

Perhaps you have neglected their dust bath, and all winter the ground was too hard for biddy to make one. Attend to it now. Fix a box of sifted ashes and dirt, or dig up the ground in the sunshine, where they will love to roll and clean themselves.

Some are still running their incubators. They will find evenly-trimmed wicks, not turned too high at first, because they run up, and screens and tubes free from dust are safe, and as helpful to even temperature as anything can be.

I have always used baking soda, in warmish water, as a cleanser of machines between hatches, but notice recommendations of zenoleum. Some such wash will clear out all moulds or vegetable growths induced by previously decayed eggs. Clean the brooders, too, for chicks have died there most likely. Sponges or damp cloths are good weapons, without soap enough to swell wood.

If you use coops, do not put them in a low place. It is liable to rain. Not even a President's inauguration could stop it. And it doesn't take much of a puddle to drown a promising brood. The coop should be moved often to keep things clean.

Curds are an excellent food when there is looseness of bowels among chicks, and as a preventive. If you have not enough milk for curds, give boiled skim milk to drink, or mix puddings with it. The Kansas Experiment Station says that oatmeal is probably the best grain for chicks. Oats cannot be suitably prepared in a common feed mill. The hulled oats are what is wanted; rolled or pinhead oatmeal, the latter preferred. Unless one has very few chicks, the oatmeal should be bought in bulk, since it is too expensive in the package form. Millet, cracked corn or cowpease, wheat and other grains can follow, which can be prepared at home.

Beef scrap is also expensive, and cannot be scattered like cracked grain, because some might be lost, but must be fed in some kind of a dish or hopper. Sprouted grains, and even the leaves starting on the roots in the cellar, are relished by early chicks. It takes two weeks to sprout grain or grow lettuce big enough for chicks, but a small box of either will not take much space. Our light furnace room is a good place. Be careful not to overfeed even common chicks, though they will bear more than turkey chicks. If food like boiled eggs, curds, bread and milk, puddings, etc., is not quickly eaten, take it away, give to old hens or to older chicks, and prepare a fresh supply for the smallest ones next time. Underfed chicks grow weak and lanky, overfed ones have liver complaint and bloat.

An ingenious way of greasing is to make a ring around the neck of chick, and then work it forward. This prevents escape of dreaded head lice, to other parts of the chicks and their return when oil is gone.

Experiments have proved that the dread gape worm can pass immediately from chick to chick, and does not necessarily make the earth worm its intermediate stopping place or host, though the gape worm embryo is often found in earth worms. Change runs often. Sprinkle air-slaked lime freely on the soil. Feed chicks chopped onions, and disinfect drinking dishes with zenoleum, a 5 per cent. solution of crude carbolic acid, or with strong soap suds.

It takes time to raise poultry well, as an architect found, who used to have Saturday and Sunday off, working only from 8 a.m. till 5 p.m. other days. Now he rises at 5 a.m., is never through till 7 or 8 p.m., with no days off, but he admits better health as a poultryman.

SHEEP NOTES.

Cut away all locks of wool from the udder of the ewe to prevent the lamb from swallowing any of it.

When the sheep's skin has been unavoidably cut in shearing, each cut should be smeared with tar. This will prevent flies from depositing their egg in the wound, and thus avoid trouble afterward.

The floor of the shearing room should be kept perfectly free from straw, chaff or litter, and if a boy is kept constantly at work with a broom in his hand removing dirt, tags and rubbish his time will be well spent.

Green forage is far superior to dry forage for sheep. Kale, rape, clover, alfalfa, vetch and winter wheat are some of the best green crops for sheep.

RIDDING THE LAMBS OF TICKS.

The dipping of young lambs in brine to kill the ticks is advocated by some It is possible that this practice is all right, but there are so many excellent coal tar products which have proved themselves very satisfactory and inexpensive. I am of the opinion that the brine would not be as satisfactory as the coal tar products. They can be procured at any drug store, and usually at any provision store at a very nominal price. The lambs should be dipped very soon after shearing, generally about eight or ten days.

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.

Puff—Old Subscriber—Have a yearling draft colt, which has had a puff come on the front of its hind hock joint. Name the cause and treatment. Ans.—From your explanation it would be difficult to give the cause. Bandage the swollen part while the colt is in the stable. Also mix 4 oz. each sulphate of iron and nitrate of potassium. Divide into 24 doses and give one at a dose twice a day in bran mash.

Swollen Leg—W. A. F., Have a horse whose hind leg has been swollen for several months. He does not go lame. Ans.—Mix 1 dram biniodide of mercury, with ozs lard. Rub a little on with th hand once a week and continue for several months. Also give one tablespoonful Fowler's solution of arsenic at a dose twice a day in bran mash and continue for six weeks.

Eczema—W. M.—Have a mare that has an itchy skin. She rubs and bites herself. Ans.—Mix 1 oz. acetate of lead and 2 ozs. tincture of opium with 1 qt. water. Shake up and apply a little to the itchy parts twice a day. Also mix 4 ozs. each of sulphate of iron and nitrate of potassium. Divide into 24 doses and give one a day in bran mash until all are taken.

Swollen Udder—M. C.—Have a cow with a swollen udder. The milk that comes from one teat is red. Ans.—Rub the udder well twice a day with camphorated oil. Also give 1 dram iodide of potassium at a dose twice a day in bran mash and continue for three weeks if needed.

Difficult Urination—W. B—Have a horse that at times has difficulty in passing its urine. Ans.—Give 1 oz. fluid extract of buchu and 2 ozs sweet spirits of ether at a dose in 1 pt of cold water. Repeat twice a day if needed.

Cough—J. E. T.—Have a dog that has a cough. Ans.—Give 1 teaspoonful cod liver oil and ten drops compound syrup of squill at a dose three times a day and continue for several weeks if needed.

Enlarged Livers—J.K.W.—Have lost a number of young ducks. They seem to grow and keep healthy until they are three weeks old, then die. When opened after death their livers are very large and yellow spotted. This disease is caused by a parasite which gains entrance into the body with the food. Ans.—To prevent, the young ducks should be fed on well boiled food, such as boiled potatoes mixed with corn and oatmeal. The young ducks should not be allowed to go into the water until they are at least one month old. Give them enough water to allay their thirst and no more. They should have a dry warm place to go into at night.

Heaves—Subscriber—Horse about nine years old; is in good working condition; she has a horrible cough; sometimes she coughs for about five minutes, a long slow cough. If we work her hard she breathes very quick. I don't think it's the heaves as she doesn't work her sides double as most horses with heaves do. Ans.—The case is in all probability heaves in the first stages. If you will procure and administer the following prescription, which any druggist ought to be able to fill, it will do no harm and in all probabilities do good: Chlorate of potash, one ounce; fluid extract of stramonium, two ounces; Fowler's solution, eight ounces; water enough to make one pint; mix. Give two tablespoonfuls two times daily.

Lumpy Jaw—F. L.—Calf two years old has something under her throttle. Hangs down like a bag of wind. She is poor and hair coming off. Ans.—This is due to a germ that causes the above named disease. Give more drahm of iodide of potash two times daily for one week and blister her throat with the following blister: Cerate of cantharides, one ounce; vaseline, one-half ounce; biniodide of mercury, three drahms; mix.

Bad Tooth or Teeth.—L.L.—Mare, dark bay, coming four in spring; about two months ago was taken sick; acted drowsy; didn't seem to care for anything, only at meal time she was just as crazy as the rest. Would eat all the grain she could get, but oats came through whole; corn came partly whole but hay or straw she would stand on and pick up a mouthful and chew it awhile and then throw it out. She would stand and hang her head clear down to the ground for hours at a time. She was that way for about two weeks. Manure was very hard and dark, but passed very little, one or two movements a day. I took her to a veterinarian, but he could find nothing wrong with her. He thought she had a bad case of toothache. Can you tell me what is the matter with her? Ans.—Let a qualified veterinarian examine this animal's mouth. Dress her teeth, give her a prescription or medicine for indigestion, and be sure you give it as directed, but above all don't forget to have her teeth attended to.

DON'T LET A LAMB ESCAPE YOU.

By this time most of the late lambs even have come and are of such a size that they are ready to be castrated and docked. It's only a matter of a very few weeks until the lambs will be grown into sheep, and one should not delay performing these simple operations now or they are likely to be neglected entirely. The lamb suffers much less of a setback when docked and castrated while young—and there is much less danger of loss. A tailed lamb is a nuisance because of the filth that gathers upon it, because of the constant invitation it extends to insects, flies and parasites, and because, if a female, of the trouble it causes at breeding time. An uncastrated lamb is at best a poor seller. So, for the good of the cause all around, see to it that every lamb on the place is attended to.