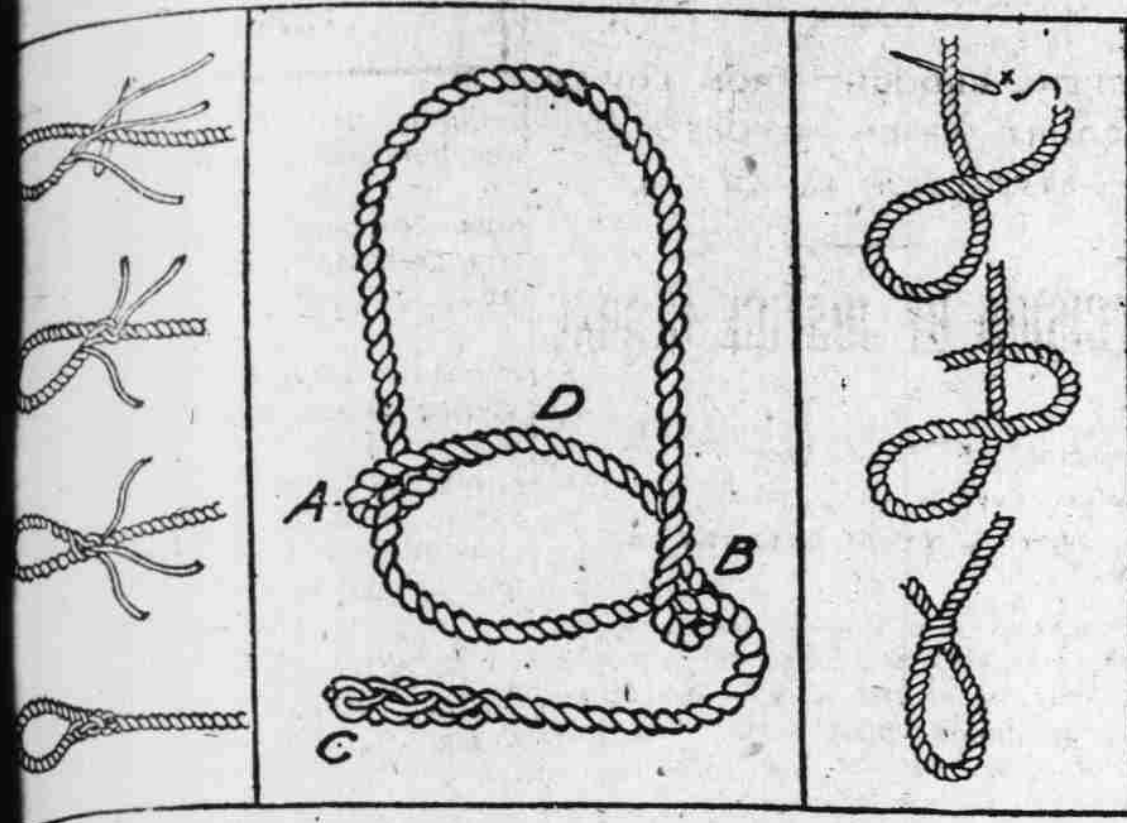
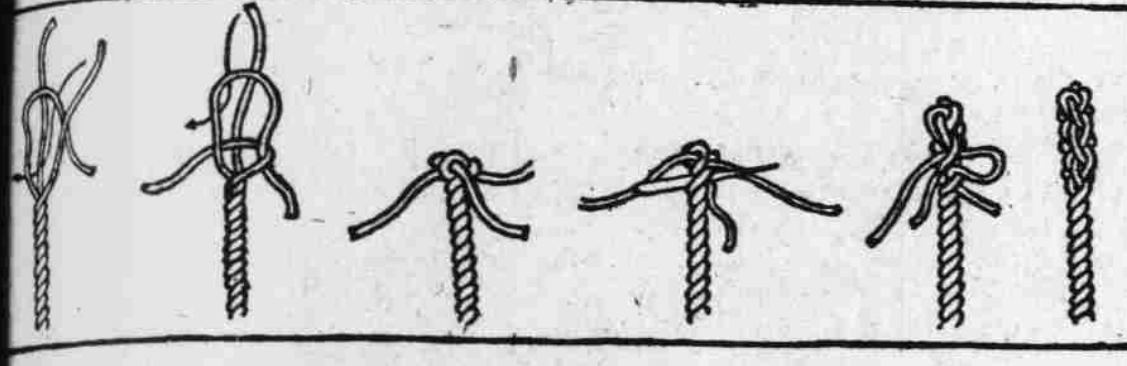


**EQUIPMENT NEEDED FOR RAISING CALVES SHOULD BE CONVENIENT**



Steps in Making Eye Loop A. Completed Halter—A, Eye Loop; B, Loop Splice; C, Crown Knot; D, Nose Piece.



Steps in Making Crown Knot. C.

Completed rope halter, and steps showing method of making. A marlin spike is used to separate the strands. The eye splice should be just large enough to allow the rope to pass freely through it. The loop splice should be far enough from the eye splice to form the nose piece. A more detailed description will be given upon application.

The equipment necessary to feed care for a calf to be raised for a bull or for a foundation breeding need not be expensive, but it should be convenient. The barn or shed in which the animal is kept should be cool in summer and dry in winter. An especially warm barn is necessary, but cold winds and rain should be kept out.

The fences around the pasture where the calf grazes should be kept in good repair. Do not teach the calf to jump or to go through or over poor fences. It is better to have a gate or to walk through than bars to jump over.

The calf may graze with other cattle in a pasture, but should be fed grain separately. A bull calf should be separated from the heifers at about three or four months of age. He should be kept with other bull calves or older cattle for company except at feeding time. The calf should then have a separate stall or pen. The stall or pen should be so arranged that the calf may see other calves or cattle, but keep it from fretting when alone.

The stall should be kept clean and dry at all times. If the ground in or about the stall is low and wet, broken stone should be used to raise it to keep it dry. Small stones or gravel or preferably clay should be put on top and firmly packed down. Use plenty of straw, leaves, shavings or other litter for bedding, so that the calf may be induced to lie down a large part of the time. A calf will not thrive and do well if made to sleep on a damp, foul-smelling bed. If the lot where the calf takes its exercise in winter is wet and muddy, the water should be drained off through ditches or otherwise disposed of.

**MEASURES FOR LIVE STOCK IMPROVEMENT**

Bulletin Issued for Benefit of Those Raising Animals.

Farmers and Stockmen Told in Plain Language of Basic Facts About Heredity and Incorrect Ideas Are Discussed.

Written in simple language for the person who raises farm animals, a new Farmers' Bulletin, just issued by the United States Department of Agriculture, tells the basic facts about heredity and how live stock improvement may be brought about. Under the title, "Essentials of Animal Breeding," this publication places before farmers and stockmen information which heretofore has been available chiefly in books, many of them being of technical character.

Topics explained and illustrated by the new bulletin include: Beginnings of life, evolution, Mendel's law, determination of sex, inbreeding, cross-breeding, outcrossing, purebreeding, pedigrees, grading up, and maternal impressions. Certain popular but incorrect ideas about heredity are discussed. Several series of pictures show how good blood "breeds on," and likewise how inferior parents stamp undesirable characteristics on following generations. The discussions deal with all the principal classes of domestic animals, and a summary of basic principles concludes the bulletin, which con-

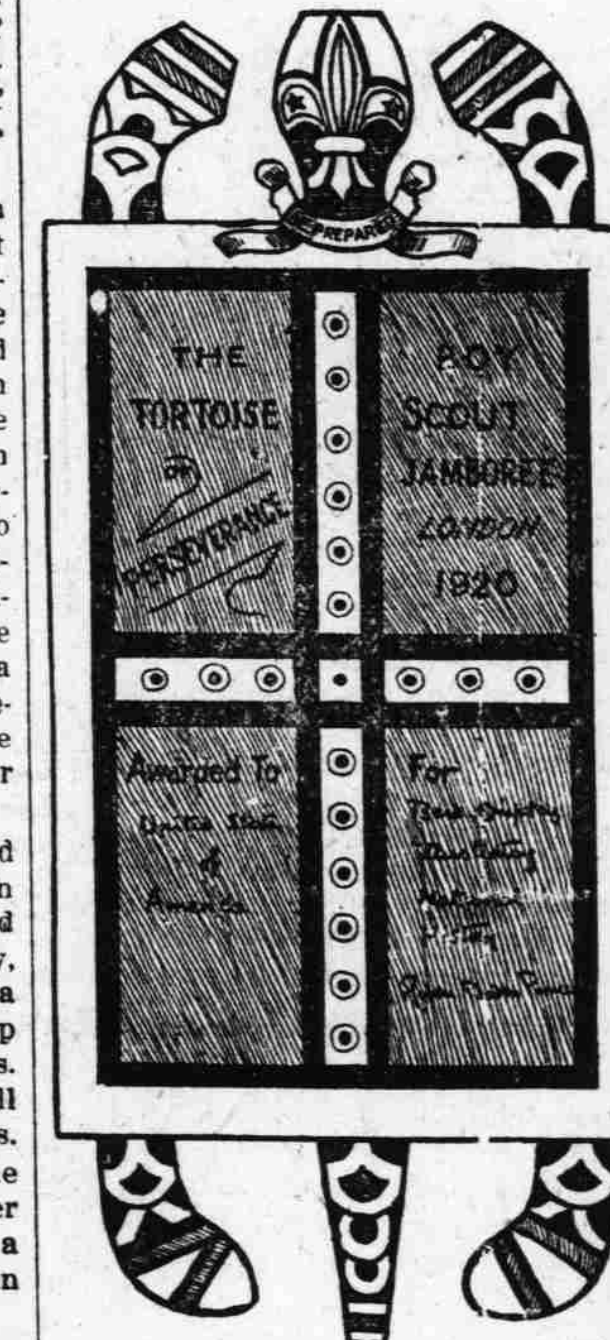
**BOY SCOUTS**

(Conducted by National Council of the Boy Scouts of America.)

**WHAT SCOUTS WON ABROAD**

The final awards show that the American delegation of 301 Boy Scouts of America decidedly made good at the recent "Jamboree" of the scouts of the world in London. They won among other things the first prize in the principal scouting event of all the world competitions. That was in the scenic displays illustrating the history of the nations from which the delegations came. These gave opportunity for rests of group demonstrations in scouting activities.

The trophy given as this chief award was the only one of the kind given at the "Jamboree." It is a thoroughly original design, made entirely by Sir Robert Baden-Powell, chief of the British scouts. It is of brilliantly painted wood and is a somewhat crude representation of a tortoise. It is called "the tortoise of perseverance." The official announcement of this prize reads: "Results of competition No. 1 of a group scenic display. America is awarded the tortoise of perseverance and the fish of endeavor for the best display illustrating national history." The "Fish of Endeavor" trophy likewise was made by Sir Robert. Our scouts also won first prize in the event classified as tribal displays showing the genesis of scouting. In their display the American boys filled the entire area of the great Olympia



This is a wooden tortoise—"The Tortoise of Perseverance"—which was made by Sir Robert Baden-Powell, as the first prize at the "Jamboree" of world scouts, and won by the American delegation.

where the "Jamboree" was staged, and treated the audience to more stunts of the Indian, plainsmen, Wild West and cowboy kind than Buffalo Bill ever dreamed of. This event gave our boys a chance to demonstrate scouting of the true American kind from practically every angle, which was just what they were prepared to do.

America was also awarded the first prize for a marching band. This went to the famous Denver Boy Scout band of 47 pieces which was selected to lead the grand international procession of the scouts of the world, an honor which was equivalent to the award as the best of all scout bands.

**SCOUT WINS AUSTRIAN FLAG.**

The announcement of prize winners in the army essay contest was made by the army board of adjudication in the New York district, which selected the prize essays from among those submitted by boy scouts. Walter A. Helbig, 16-year-old senior of Morris high school and a scout in Troop No. 140 of the Bronx, was awarded the chief honors, his essay being selected as the winning one for both the entire district and for the Borough of the Bronx. The prize as district winner is an Austrian flag, brought to this country as a war trophy by an English Red Cross officer. As borough winner he has won for his school a silk American flag.

**HOW SCOUTS USE SPARE TIME.**

The boy scout troop of Flandreau, S. D., has undertaken the job of naming and placing guiding sign boards on the roads in the vicinity. Scouts of Bellingham, Wash., waged unceasing warfare against the caterpillar during the past season. All but 24 of the entire army of more than 2,000 boys mobilized for the recent cleanup campaign in Portland, Oregon, were members of the Portland Council of Boy Scouts.

**POULTRY**

**TRAP NEST IS VALUABLE AID**

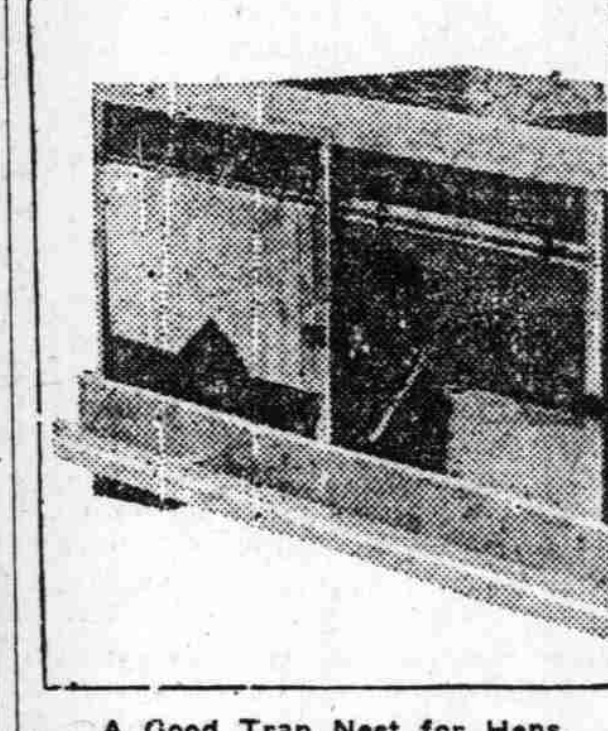
Enables Owner to Ascertain Just Which Hens Are Laying—Requires Much Attention.

The purpose of trap-nesting the flock is to ascertain which hens lay, either for determining what record they make, or for identifying their eggs during the hatching season so that pedigree records are possible. Trap-nesting requires a considerable amount of attention, but is a valuable aid in developing a flock of poultry along lines of breeding for egg production.

A trap-nest is a laying nest so arranged that after a hen enters it she is confined until released by the attendant. One trap-nest should be provided for each four hens kept in flocks of 50 or more, while more trap-nests are necessary in smaller flocks. The hens are marked with numbered bands and a record is kept of their egg production. The nests should be visited at least four times daily, and preferably much more often, frequent trips being especially necessary when the hens are laying freely and during hot weather.

The trap-nest may be attached to the underside of the dropping board with the front facing the pen, and arranged so that it can easily be removed, or it may be placed on the walls of the pen. If the nest is placed under the dropping board, the latter will serve as a top for the nest, and the rear of the nest may be of wire to allow good ventilation in warm weather. If the nest is placed on the wall, slats or wire should be inserted from the front of the nest to the wall at a sharp angle to prevent the hens from roosting on the nest.

Of course, it is essential to make the nests as attractive and cozy as possible, and this is accomplished by providing them with plenty of clean litter, as often as a new supply of straw is needed. Furthermore, in particularly objectionable cases it pays to clean all the litter from the floor of



A Good Trap Nest for Hens.

the house, in order to break the hens of laying pronisiously wherever they desire. By removing the straw and bedding, the floor of the house is not so attractive as a nesting spot for the hens and pullets, and hence they are forced to seek the trap-nests.

**BLUE OINTMENT KILLS BUGS**

Equal Parts of Poison and Vaseline Applied to Fowl's Body Is Effective.

Body lice on fowls can be quickly and effectively eliminated by the blue ointment treatment. Get your druggist to mix equal parts of vaseline and blue or mercurial ointment. A piece the size of a pea rubbed on to the skin below the vent will kill both lice and nits. Do it this spring and fall but don't overdo it nor use it on chicks under three months old.

**PLAN FOR BETTER CHICKENS**

Fall Is Good Time to Obtain Few Purebred Fowls—Get Hens That Molted Late.

This fall is a good time to buy a few purebred hens if you are planning to go in for better chickens. Select hens that have not molted by the middle of October and you will probably have a group of good layers. Next spring they can be mated with a purebred rooster from a high producing strain and your foundation flock is under way.

**STUDY OF MARKET DEMANDS**

Poultry Raiser Should Know What Color of Eggs and Meat Will Bring Best Prices.

Every poultry raiser should make a study of the market demands. A uniform color of eggs and flesh in poultry is desirable. A mixed flock will not produce uniform eggs or meat, and eggs from such a flock are not desirable for hatching.

**FURNISH HENS FRESH WATER**

One of Common Causes of Digestive Troubles Among Poultry Flock Can Be Prevented.

Unclean drinking water is one of the common causes of digestive troubles in poultry during hot weather and the important point is not so much to save labor as to furnish those birds with a supply of pure fresh water at all times.

**DADDY'S EVENING FAIRY TALE**

MISS KATY-DID.

"I was most obliging and willing," said Miss Katy-Did. "I am not always like that, but I have been lately, for there has been a very nice person around who drew pictures and she has been drawing my picture. She has fed me brown sugar and I have sat upon her hand and she has been able to see just what I looked like."

"She knows I have two long feelers, six legs and green wings, the color of leaves. She has even heard me sing. And I have set a good example to many of the other bugs and little creatures about. To be sure we aren't always so tame, we don't always like to be watched, so much. We're not always sure whether we may be stepped on or something like that which is far from pleasant!"

"But we've been sure she wouldn't step on us and that the friends she has come to the country to see her won't step on us either."

"The Yellow Bellied Sapsuckers and Mrs. Downy Woodpecker and a great many of the other members of the bird family have moved here this year, and some of them have come back this year who were here last year. But I want to tell of the others—the bugs and such creatures who are about here and of the suits they wear."

"There is Mr. Violet-Purple Spider. He is rather round and fat but for all that he is good-natured. They say fat creatures are apt to be good-natured. Well, it would be hard to be a fat creature and not feel good-natured for just think of what would be expected of one."

"Mr. Brown Jumping Beetle and family are spending the summer here. They prefer the country to anything else. They say the sea-shore is all right for some creatures but they're happier here. There are the usual bugs and worms who go after the apples and in turn have the birds go after them. Such races and games are very interesting to watch."

"Then Mrs. Brown Bug, a small little creature, paid a visit the other day to a lady's foot. The lady was sitting talking to the one who owns this little country cottage where I'm fed the brown sugar, and little Mrs. Brown Bug jumped up and said, 'How-do-you-do,' in her funny little buzzing voice. The lady laughed it seems and said to the one who owns the cottage, 'And so you even make friends of the bugs.' And it seems she had no sooner said that than a grasshopper dressed in a brown suit with brown feelers and eyes and legs and a green tummy with touches of gray and brown throughout hopped upon her other foot and said, 'Good-day.'

"The brown and russet and golden and yellow and white butterfly families came about too, opening and closing their wings as they flew back and forth in the sunshine. The spotted



"Fed Me Brown Sugar."

ones came along too and talked of how soon the autumn colors would look so beautiful along with their sunny colors. Of course the lady couldn't understand what they said but she did think they were tame and they felt at home.

"They know of course that no one here is cruel and that no one will catch them in horrible nets and save them for collections. They know that the lady who owns this cottage thinks it is as cruel to do that with butterflies as though she caught little boys and girls in a great net and then kept them until their little arms and legs were still and until there was no life in them."

"For oh, there is nothing much worse to my mind, than people who will catch butterflies, happy, sunny butterflies who love the summer and the sun and the flowers and who try to add to the beauty of the world. They don't want to be caught in great cruel nets and left to struggle and die!"

"So I tell all the creatures around here that our lady won't hurt us and so we all come around led by Miss Katy-Did who is such a pet that she goes in and out of the cottage as she pleases. Yes I do!"

And all the creatures knew that Miss Katy-Did spoke the truth.

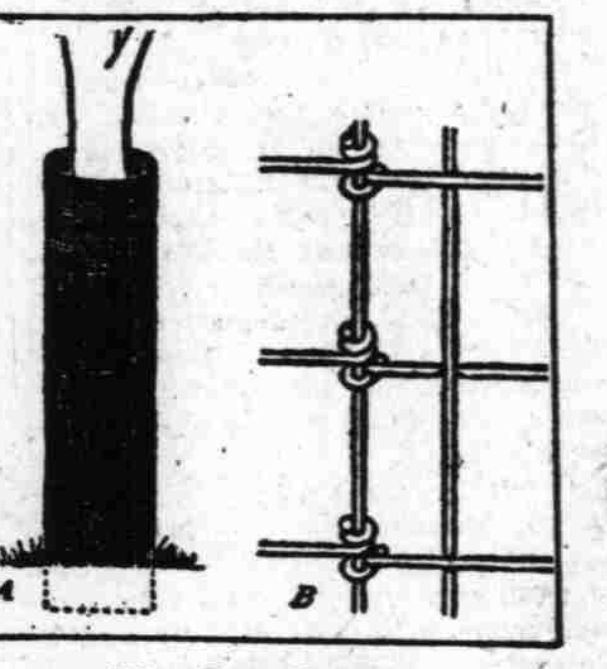
**Must Mind Mother.**  
The puppy had been punished and was sulking in a corner. To him came the small daughter of the house to administer, not comfort, but advice. "You may as well be good first as last, Buddy," she admonished. "Every one that belongs to mother has to mind. I've been through it all and I know."—Exchange.

**ORCHARD GLEANINGS**

**WIRE PROTECTOR FOR TREES**

Rabbits, Field Mice and Other Rodents Destroy Bark During Fall and Winter.

Orchard trees and especially the young ones should be protected against rabbits, field mice and other rodents that destroy the bark during the fall and winter. The most effective time for this work is during November. Field mice can be kept from damaging the trees by mounding earth around the base of each tree, says Orange Judd Farmer. The mounds should be about 15 inches across and cover the trunk for a height of 8 inches. All weeds and dead grass should be raked away from the base of the trees. Mounding is not effective against rabbits, but complete protection can be



Wire Tree Protector.

secured by the use of cylinders of galvanized iron wire screen. A piece of 1/4-inch-mesh wire 12 by 24 inches makes a convenient size protector for small trees. In order to form the cylinders the edges of the wire must be fastened together as shown in the illustration, or by overlapping the edges and sewing them together with a fine wire. The cylinder should be imbedded in the ground 3 inches to prevent rodents from burrowing underneath.

**LARGE SHIPMENT OF FRUITS**

Peaches Surpassed Only by Apples, Oranges and Watermelons—Grapes Rank High.

Peaches lead all other short season tree fruits in the United States in the number of carloads shipped from producing regions annually, according to figures collected by the bureau of markets of the United States Department of Agriculture. Considering all fruits, peaches rank fourth in car lots sent to market, being surpassed only by the long season fruits—apples and oranges—and by watermelons. The approximate yearly average number of cars of the four fruits mentioned reaching market during the past four years are: Apples, 67,000; oranges, 35,000; watermelons, 20,000; peaches, 25,000.

The only close competitors of peaches on the markets of the United States are grapes, of which about 22,000 carloads were shipped annually, and cantaloupes, the annual shipments of which were approximately 17,000 cars. The carloads of strawberries and pears shipped were slightly less than half those of peaches. An average of approximately 7,000 carloads of grapefruit and 3,000 cars of plums and prunes combined were shipped annually for the past four years.

**ORCHARDS AND FRUIT YARDS**

Best Time to Feed Is in Winter When Ground Is Frozen—Most Berries Are Hardy.

Orchards and fruit patches are best fed during the winter when the ground is frozen, for this covering is good to prevent soil heaving, and the fertility is being washed down into the soil ready for use early in the spring.

Most of the berries are hardy without protection in winter so far as cold is concerned, but the light mulch will keep the soil moist and prevent frost from loosening the roots. When putting the mulch on strawberries make it thin or it will smother the plants.

Barnyard manure with plenty of bedding is the best fertilizer for fruits, but bonemeal and wood ashes can be used with it to advantage, as the manure is deficient in these elements.

**PACKING APPLES IN BARRELS**

Retailers Are Strongly Opposed to Policy of Overfacing—Favor One-Fourth Inch Size.

The aim should be to improve the pack, for we are now overfacing the barrel. Most commission dealers believe the face should show slightly better than the average in color, but retailers are strongly against the policy of overfacing. Because they are faced honestly, certain well-known brands sell for more than other packs of the same quality because they are overfaced, writes C. S. Wilson in Farm and Home. Opinions differ somewhat, whether to make one pack of all apples of 2 1/2 inches and up, or whether to pack in one-fourth inch sizes. Almost without exception the retailers favor one-fourth inch sizes, because so many apples are sold by weight.