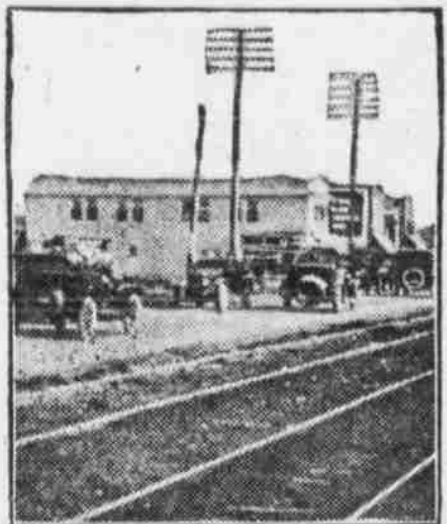


# PUBLIC ROADS

ROADS IN SHAPE FOR WINTER

Need for Improved Highways This Year Will Be Greater Than Ever Before in History.

Highway preparedness for next winter is almost a negligible quantity in many states whose roads of military and economic importance will demand their utilization during the "snow-bound" period. A survey of the plans for snow removal of every state in the Union having sufficient snowfall to impede highway traffic during the winter months has just been completed by a large rubber concern. The reports from



Heavy Traffic Follows Improvement.

the various state highway commissions disclose a surprising lack of organization and legislation to cope with the situation that promises to be worse this winter than the freight congestion and embargo period of last winter.

Never before in history have American highways played such an important part in transportation. Fleet after fleet of powerful motortrucks are plying between towns and cities. They release thousands and thousands of freight cars for war duty elsewhere. To take the trucks off the highways next winter would be nothing short of a calamity.

America's second winter in the world war—with more munition factories, more airplane plants and over 1,000,000 men in France who must have food and supplies from the rural districts and the inland commercial centers—will keep duties on the commerce never before heard of—duties of hauling that our railroads can't hope to meet.

Highways and trucks must come to the rescue. But under existing laws state highway commissions have no funds to keep the main traveled highways opened and cleared of snow.

The lack of foresightedness and provisions for snow clearance is alarming, according to the company, which urges early action to prevent disaster.

## GOOD ROADS ARE NECESSARY

War Needs Make Highway Improvements Imperative for Transportation of Supplies.

Good roads have long been a need. Today they are a necessity. Instead of putting by road improvements until the war is over, war needs make immediate road development the more imperative. The country can produce plenty of food and supplies if we can but transport them where they are needed. The motor car and the motor truck can do the work if the roads are put in shape and kept in shape. It is not too much to say that bad roads in America threaten the lives of our men on the fighting front. They must have munitions, food and equipment, and these must be taken to them over roads here as well as abroad. Do your part by boosting road improvement in your community. The time to start is now.—Milestones.

## BENEFIT OF IMPROVED ROADS

Make It Possible to Consolidate or Centralize Schools—Cost Reduced to Minimum.

(From the United States Department of Agriculture.)

That improved roads would benefit our country-school system there would seem to be no doubt. Good roads make it possible to consolidate or centralize the schools and to establish graded schools in the rural districts. Such schools centrally located will accommodate all of the children within a radius of four or five miles. In many communities having the advantage of improved roads commodious buildings have been provided, more competent teachers employed and modern facilities for teaching supplied at a minimum cost.

## Not Good for Earth Roads.

The use of clods, sods, weeds or vegetable matter in building earth roads should be avoided because they retain moisture.

Give Split Log Drag a Try. Those of you who have tried it know that the split-log drag will work wonders if it is given a good chance.

Gravel Roads First Step. Gravel roads are the first step toward better roads. The next step is the broken stone or macadam road.

# DAIRY

CONTAINER OF PROPER KIND

Those With Handles Are Much Less Likely to Be Damaged in Transit in the Mails.

(Prepared by the United States Department of Agriculture.)

One important requirement for parcel post shipping and marketing is a proper and satisfactory container. Sometimes the consumer can secure containers more readily and economically than the producer. Those with handles are much less likely to be damaged in transit in the mails than those which are not thus supplied and which are likely to be tossed or thrown or handled by the string or twine used in tying them. A bamboo basket serves the purpose very well and may be used a long time. Ordinary splint baskets made of strips of veneer may also be used, and if they can be secured at a



Container for Shipping Cheese by Parcel Post.

price sufficiently cheap a new one for each shipment is more economical than having them returned, unless they are sent back in lots of ten or more under one cover. This, of course, necessitates using them without a wooden handle, in which case a heavy twine should be used for a handle. This twine can be untied and the baskets used, or placed in one another, for return shipment. If a basket with a wooden handle is used, care should be taken to see it is securely nailed, not only at the rim of the basket but farther down toward the bottom, so as to prevent undue leverage which may break loose the nailing.

Corrugated pasteboard cartons frequently may be found useful and desirable for this service. They are made in a great variety of sizes, dimensions, and patterns, and when empty are shipped knocked down flat.

Few persons know how to prepare and pack fruit and produce for market. Proper packing for parcel post marketing is of primary importance and needs to be emphasized so that both the contents and the container may carry properly, arrive in good condition, and present a satisfactory appearance. The pack should be regular, of as nearly uniform produce as possible, and of full measure according to the quantity ordered. A little practice will enable almost anyone to pack a basket or container of any kind in a satisfactory manner.

## FLAXSEED VS. WHOLE MILK

Outline of Results Secured by Experts at North Dakota Station in Feeding Calves.

Any successful method that will cut down the period of feeding whole milk to calves is usually welcomed by dairymen. Experts at the North Dakota experiment station have used flaxseed and skim milk with good results in the following manner:

Whole milk was fed for the first three weeks. Then during the age from three weeks to six months skim milk was fed with enough flaxseed to take the place of the fat in whole milk. Each calf was given two gallons of skim milk a day.

Calves fed in this manner did not do quite so well the first three months as a similar group of calves fed whole milk, but at the end of the six months there was practically no difference in condition except that the calves fed whole milk averaged about four pounds less in weight. But considering that \$19 worth of whole milk per calf had been saved in the six months' period, the use of flaxseed was considered the better practice.

## KEEP CREAM CANS COVERED

Direct Rays of Sun Counteract Whatever Care Has Previously Been Made to Keep Cool.

(By R. McCANN, Colorado Agricultural College, Fort Collins, Colo.)

A great part of the value of keeping cream cool on the farm and at the station or creamery is lost in the cream being exposed to the direct rays of the sun while being hauled from the farm to the point of sale. Far too few people stop to realize the importance of covering their cream cans when bringing them in to town. Expensive jacketed cans are not a necessity to keep the cream cool; in summer weather just an ordinary piece of clean wet burlap or blanket thrown over the cans will keep the temperature of the cream as much as 20 degrees below what it would rise to if left uncovered while being transported over the average hauling distance.

# FEED STATIONS ATTRACT BIRDS

Feathered Songsters Help Protect City Parks From Insects That Destroy Foliage.

## ARE PLEASING TO CHILDREN

Add to Pleasure and Interest of Thousands of Lovers of Nature—Minneapolis Superintendent Gives Experience.

(Prepared by the United States Department of Agriculture.)

Besides the enjoyment of having birds present in parks, there is the economic value of having them as enemies of plant pests. They help to police the parks by reducing the insects that feed on foliage and are peculiarly important, because the beauty and utility of parks largely depends on preserving the vegetation.

### Birds' Place in Parks.

Such changes as may be made to attract birds to parks may also enhance the beauty or interest of the park itself, as in fountains and martin houses and other artistic nest boxes. Feeding stations may have slightly designs and be worked in as part of other park structures, and their presence adds not alone to the benefit of the birds, but to the interest of thousands of lovers of nature. They are particularly pleasing to children and instill



Birds Collected in Tree Tops.

the lessons of bird protection as opposed to the practices of bird destruction sometimes indulged in.

### Experience in Minneapolis.

The value of such stations is attested by Theodore Wirth, superintendent of parks in the city of Minneapolis. He says:

"For the past five or six years we have maintained a number of feeding stations in various parts of our park system, with very satisfactory results. I give a list of the birds which stay with us over winter. The permanent winter birds found in the vicinity of our parks are the chickadee, blue jay, white-breasted nuthatch, downy and hairy woodpeckers and screech owl; winter visitors, the redpoll, tree sparrow and junco; irregular winter visitors, the evening grosbeak, Bohemian waxwing and snow bunting. It is safe to say that a large number of these species are staying in the park on account of the food supplied them. The feeding of the wild birds in the parks is a great success and will be continued."

Summer food should also be supplied in the form of berry-bearing shrubs and the fall planting of these should be arranged for. Those interested should send to Washington for Department of Agriculture Bulletin 715, "Attracting Birds to Public and Semipublic Reservations."

## SEED NEEDED FOR PLANTING

Quite Frequently Home-Grown Supply is Better Than Any That Can Be Purchased.

(Prepared by the United States Department of Agriculture.)

Some of the garden seed now growing abundant in your garden will be needed next year when planting time comes. Better save a supply while you can. It is not hard to save seed and quite frequently the home-grown supply is better than any that can be bought from the seedman. Home-grown seeds are suited to local environment and the vigor and productivity of the plants from which they are selected can be taken into consideration—which is an important point in selecting home-grown seed. Wait until the seed matures, then dry it thoroughly immediately after it has been harvested, put it in packages well labeled and store in a dry place where it cannot be destroyed by insects, rats or mice.

# INCREASE YIELD OF WHEAT NEXT SEASON

Early and Proper Preparation of Seed Bed Is Urged.

Thorough Tillage Is Important to Conserve Necessary Moisture—Soil Should Be Harrowed Immediately After Plowing.

(Prepared by the United States Department of Agriculture.)

Big wheat yields, the object of every member of the American land army who is planning to take part in the 1919 Liberty wheat harvest, begin with the preparation of the seed bed. It must be firm, moist and well compacted beneath with a mellow, finely divided upper three inches of soil, and earliness in its preparation is important.

If the importance of thorough tillage were more generally recognized and proper methods of seed-bed preparation were employed more common-



Seeding Wheat on Corn Ground With Two-Horse Disk Drill.

ly throughout the so-called humid areas, there would be less frequent losses from drought and better wheat crops would result. In this area the mistake is often made of thinking that there will always be moisture enough present for maximum crop growth, and the result is short crops where more attention to moisture preservation would have assured good yields.

If wheat is grown in rotation with oats or after wheat, the stubble should be plowed to a depth of at least seven inches immediately after harvesting the crop of grain. The ground should be harrowed within a few hours after plowing and cultivation with harrow, disk, drag, or roller should be given as necessary thereafter until planting time, to kill weeds, to settle and make firm the subsoil, and to maintain a soil mulch above. Late plowing does not allow time for these necessary operations.

If a cultivated crop precedes wheat frequent cultivation given to this crop will preserve moisture and maintain a soil mulch. If level cultivation has been practiced, a good seed bed can usually be prepared by disking and harrowing after removing the crop. If weeds are present, however, it may be advisable to plow shallow, the disk preceding and following the plow.

Early plowing and thorough tillage of the plowed soil aid in catching the water falls and in storing this and the water already in the soil for use by the wheat plants. The firm seed bed under this mulch enables the young wheat plants to make use of the subsoil waters which rise by capillarity when there is a perfect union between the plowed soil and the subsoil. Sufficient water is thus assured for the germination of the seed when sown and for the early fall growth of the seedlings, a very important consideration. Plant food is also likely to be more abundant in the soil when such methods are employed.

## CORN BINDER IS TIME SAVER

Machine Delivers Crop in Bundles Which Make It Considerably Easier to Handle.

(Prepared by the United States Department of Agriculture.)

With a corn binder and three horses in corn that is standing well, three men, one to drive and two to shock, can harvest about twice as much as when cutting by hand. From seven to nine acres can be cut in a ten-hour day with a binder. The same three men could scarcely cover more than four acres in the same length of time when cutting by hand. With the binder they can cut and shock a 40-acre field of corn in a week or less, effecting a big saving in time, though perhaps some in expense. The binder delivers the corn in bundles, which makes it considerably easier to handle both in loading on wagons and at the ensilage cutter. If your acreage in corn is not large enough to justify an investment in a modern corn harvester, join with one or two of your neighbors and purchase one co-operatively. If this cannot be done, rent a binder—it will take the place of one hired man in cutting and shocking, or two in cutting corn for ensilage.

## BEST PLACE TO STORE SEED

Dry, Well-Ventilated Room Is Preferable—Cellars Too Moist and Attics Too Hot.

(Prepared by the United States Department of Agriculture.)

Store seed in a dry, well-ventilated room. Cellars are too moist, attics usually are too hot, but a second-story room furnishes the ideal location. Seed can be protected against mice by storing in tin boxes or mouse-proof wooden boxes, or by suspending in cloth bags.

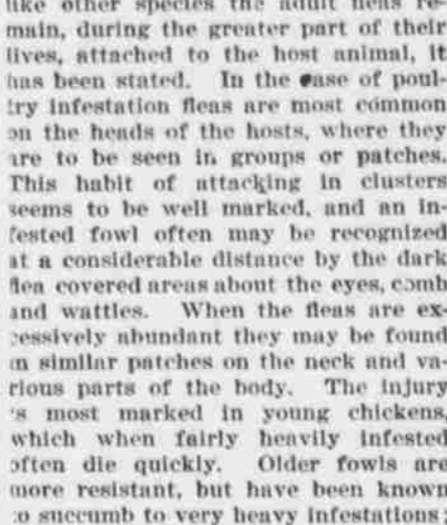
# POULTRY

FLEAS INJURIOUS TO FOWLS

Sticktight Variety Found in Many Southern States Is of Importance—Few Other Types.

(From the United States Department of Agriculture.)

Southern poultry raisers have an additional poultry pest to combat aside from lice and mites. It is the sticktight flea, or Southern chicken flea, which in many parts of the South and Southwestern states is of great importance. It has been reported as injurious to poultry as far north as Kansas. This form of flea attacks a number of different hosts including poultry, dogs, cats, and some wild animals. Unlike other species the adult fleas remain, during the greater part of their lives, attached to the host animal, it has been stated. In the case of poultry infestation fleas are most common on the heads of the hosts, where they are to be seen in groups or patches. This habit of attacking in clusters seems to be well marked, and an infested fowl often may be recognized at a considerable distance by the dark flea covered areas about the eyes, comb and wattles. When the fleas are excessively abundant they may be found in similar patches on the neck and various parts of the body. The injury's most marked in young chickens, which when fairly heavily infested often die quickly. Older fowls are more resistant, but have been known to succumb to very heavy infestations;



Head of Rooster Infested With Sticktight Flea.

and certainly the fleas materially reduce the egg production, retard the growth of fowls, and diminish their size. The eggs are deposited by the adult flea while it is attached to the host. They fall to the ground under the roost in chicken houses or under sheds frequented by the poultry and there continue to develop. When dogs and cats are infested, the immature stages develop largely in the material used by them for beds. They require comparatively dry material in which to breed, but a large amount of air moisture is favorable to them. Adults of this species continue to emerge from infested trash for four or five months after all hosts have been removed; hence it is easy to understand why chicken houses may still have many fleas in them after being unused for considerable periods.

A few other species of fleas are occasionally found in poultry houses. Some of these may be normally bird-infesting species, while others are at home in the houses of domestic poultry. Infestations by these fleas have been reported from several places in the Northern states, particularly in the Northwest. The presence of the fleas is usually first detected by persons entering chicken houses and being attacked by them. These fleas do not remain attached to the host continuously as does the sticktight flea. As a preliminary step it is well to see that the poultry are kept away from other animals as far as possible. Especial care should be exercised to keep dogs and cats from lying about the chicken yards or places frequented by the poultry. All animals, and the poultry as well, should be excluded from beneath houses and barns, as such places are favorable for flea development and difficult to treat if they become infested. These precautions should be followed by a thorough cleaning out of the chicken house and outbuildings frequented by the poultry. All of the material should be hauled a good distance from the buildings and scattered. The places where the fleas are thought to be breeding should then be sprinkled with crude oil.

It is rather difficult to destroy the sticktight flea on fowls without injuring the host. It is desirable, however, in the case of heavy infestations to destroy as many of the fleas as possible. This can be accomplished by carefully applying carbolated vasoline to the clusters of fleas on the fowls, or greasing them with kerosene and lard—one part kerosene to two parts lard. In all cases care should be taken that the applications of grease are confined to the seat of infestation. It is important that dogs and cats be freed from sticktight fleas. This may be accomplished by washing them in a saponified coal-tar creosote preparation, or by greasing the most heavily infested parts with kerosene and lard. Rats sometimes harbor these fleas in considerable numbers, therefore their destruction will aid in the control work as well as doing away with another troublesome chicken pest.

The thorough cleansing of poultry houses and runs and the application of crude petroleum will be found to aid in the control of other important enemies of fowls, such as mites and chicken ticks or "blue bugs."

# IN MISERY FOR YEARS

Mrs. Courtney Tells How She Was Cured by Lydia E. Pinkham's Vegetable Compound.

Oskaloosa, Iowa.—"For years I was simply in misery from a weakness and



nothing seemed to do me any good. A friend advised me to take Lydia E. Pinkham's Vegetable Compound. I did so and got relief right away. I can certainly recommend this valuable medicine to other women who suffer, for it has done such good

work for me and I know it will help others if they will give it a fair trial."

—Mrs. LIZZIE COURTNEY, 108 8th Ave., West, Oskaloosa, Iowa.

Why will women drag along from day to day, year in and year out, suffering such misery as did Mrs. Courtney, when such letters as this are continually being published. Every woman who suffers from displacements, irregularities, inflammation, ulceration, backache, nervousness, or who is passing through the Change of Life should give this famous root and herb remedy, Lydia E. Pinkham's Vegetable Compound, a trial. For special advice write Lydia E. Pinkham Medicine Co., Lynn, Mass. The result of its long experience is at your service.

## PATENTS

Watson E. Coleman, Patent Lawyer, Washington, D.C. Advice and books free. Rates reasonable. Highest references. Best services.

Theorist. "I always believe in saving some thing for a rainy day." "How much have you saved?" "Oh, I haven't saved anything, but I believe in it."

A New Way to Shave. Tender skins twice a day without irritation by using Cuticura Soap the "Cuticura Way." No slimy mug, germs, waste of time or money. For free samples address, "Cuticura, Dept. X, Boston." At druggists and by mail. Soap 25, Ointment 25 and 50.—Adv.

Noah Must Have Had Patience. A long and patient but vain effort on the part of a khaki-clad driver to induce a mule drawing what appeared to be a load of laundry through the gateway of a hospital afforded considerable amusement to the boys in blue who were watching the proceedings. The mule would do anything but pass through the gateway. "Want any 'elp, chum?" shouted one of the boys in blue to the driver, as he rested a moment. "No," replied the driver, "but I'd like to know how Noah got two of these blighters into the ark!"

Gullity. A certain admiral whose addiction to certain language is well known in the navy was one day inspecting one of the ships under his command. When he came to the brig (ship's jail) his piercing eye traveled from one to another of the prisoners, who were evidently ill at ease under his scrutiny. "What the — are you in for?" he demanded of one. "For using profanity, sir," was the meek reply.—Life.

Up to Aunt to Be Good. My nephew, Bobby, was celebrating his fourth birthday and one of his aunts was telling him how good everybody was to him because he got so many things. Bobby answered: "You hasn't been so good, 'cause you hasn't give me nothing yet."—Chicago Tribune.

E. E. Dudding of New York wants 100,000 American convicts put to work in munition plants.



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A delicious food, rich in the vital phosphates. No Waste. You eat and enjoy it to the last atom. Health making, nourishing, economical.

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