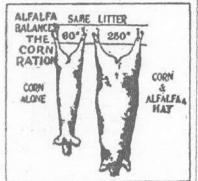
EXPERIMENT WITH HOG FEED

Illustration Shows Difference in Size of Animals Fed on Alfalfa and Corn, and Corn Alone.

The pigs shown in the illustration were litter mates fed at the Kansas experiment station. The big pig was fed on a ration of corn and alfalfa hay; the little pig on corn alone. The experiment was carried on for eight



Balanced Feed.

months. The alfalfa-corn pigs averaged 250 pounds dressed; the cornalone pigs but 60 pounds each. Pigs must have protein. There is plenty of it in alfalfa. The balanced ration made the difference.

PROTECT STOCK FROM FLIES

Department of Agriculture Recomends Mixture of Soap and Kerosene-Use Spray or Wash.

(By CHARLES I. BRAY, Colorado Experiment Station.)

During the summer months, when

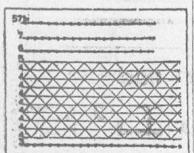
cattle are most likely to be bothered with flies, there are many people who wish to know what can be done as a preventive. There are a number of methods sometimes recommended for this purpose, some of which are supposed to keep flies off the animal by virtue of their bad odor or greasy nature, and some which are supposed to be sprayed on to kill the flies. Considerable doubt exists as to the benefits to be obtained from using any of these treatments, or as to the relative value of the different ways of combating flies

For spraying the backs of cattle at milking time, there is possibly nothing more reliable than kerosene emulsion. The following recipe given by the United States department of agriculture is one of the best ways of making this: Dissolve one-half pound of hard soap in one gallon of hot water, and while still at near boiling point add two gallons kerosene, and emulsify by use of a force pump or agitator of some kind. Dilute with water, one part emulsion to eight parts water, and use as a spray, dip or wash.

SWITABLE DOGPROOF FENCE

Arrangement Tried by Gover Rangers and Found Satisfactory-Height Is 57 Inches.

On one of the government's forest ranges this fence has been tried for three months and found to be dog and cayoteproof. Not a coyote made his way through it. Posts are set 16 feet apart. They are 71/2 feet long and set



Dogproof Fence.

21/2 feet the ground The lower wire lies fla 1 t' ground. The numbers on the cut indicate the inches betweer wire 'rands.' le total height of the fence : 57 inche The wovenwire fencing is 36 inches high and has a four-incl mesh

SHEEP REQUIRE SOME SHADE

Best Place for Shed Is on Open Ground Where There Is No Grass-High Fence Will Do.

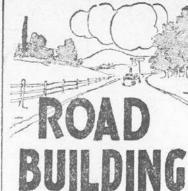
Be not allow the sheep to lie around in fence corners or huddle in underbrush. The best shade is a shed on open ground where there is no grass.

A little bit of shelter is fine for sheep. Even if it be nothing more than a high board fence on the side toward the sunshine it will help a lot. The sheep can snuggle up near to that and escape the direct rays of the

Better than such a fence is a piece or woodland. We have a cluster of little bemlocks in our pasture, up on a side hill, says a writer in an exchange. The sheep run up into that and escape not only the heat, but also the miserable flies that hurt them so.

Examine Ram for Ticks.

It is a good plan to examine the ram once in a while for ticks, and if any are found he should be thoroughly soaked with a few gallons of a dip preparation. This can easily be done with a hand-sprinkler while the ram is in a standing position.

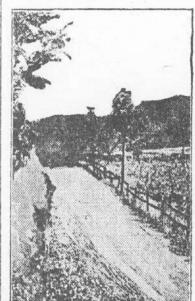


GOOD ROADS AND MOISTURE

When Soil is Dry it Crumbles to Dust and When it Contains Too Much Water it Becomes Mud.

By W. C. PALMER, North Dakota Ex-

One of the important factors in roadmaking is to control the moisture content of the soil in making up the roadbed. When the soil is dry it crumbles to dust and when it contains too much water it becomes mud. These are the two extremes to avoid. To make a hard roadbed the soil must contain a fair amount of moisture. The control of the moisture requires that the roadbed be higher in the middle and smooth so that water cannot stand on it but will run off. If water



Good Road in North Dakota.

can stand on the road, ruts will result and when these are ground down dust forms and finally a loose roadbed

Keeping the roadbed well crowned and smooth will hold the moisture in it so that it will pack hard.

Weeds must also be kept several feet from the wheeltrack else they will draw the moisture from the roadbed and thus loosen it up; this is especially true in regions of moderate

Trees should not be allowed to shade the road as this keeps it too moist on the surface after rains so that travel spoils the surface.

The making of a smooth roadbed requires that when the soil is put on, it be laid in layers and not in piles. When dumped in piles some places will be more packed than others and there will likely be a difference in the density, while if laid on in layers this infertile, and these can be cooked and will be avoided. Each layer be harrowed, or better yet, disked and packed before the next one is laid down. In this way a good roadbed is secured from the first, while if the soil is just dumped on the road to be leveled and packed by the traffic over the road a good roadbed will never be secured.

The best tool for keeping the road well crowned and the surface smooth is the splitlog drag. This tool should be used soon after a rain. The soil is then loose and easily moved. The drag moves but small amounts of soil and smears it on the roadbed in thin layers which is just what is wanted. It cuts off any projections and fills up any low places.

Where there is standing water the roadbed should be kept at least a foot above the water surface and eighteen inches is better. The nature of the soil and the length of time that the water stands along the road will to a degree determine how high the roadbed must be above the water,

In dry-farming territory it is important to keep the weeds away from the roadbed and to keep the roadbed well crowned and smooth.

The Split-Log Drag.

The split-log drag has contributed more toward the economic maintenance of the public highways than any implement of modern usage. It does not require special acts of the legislature, bond issues or expensive educational campaigns to make it available as usually precedes construction work. A drag can be built or purchased for \$20 and is easily operated by anyone who can drive a team.

Promote Rural Prosperity. It is now generally admitted that good roads promote rural prosperity, even if they do cut down the profits of the men who hired out teams to

Stunted Pigs. Smaller pigs are kept stunted if left

to run with the larger, stronger ones by being crowded from the feeding trough.

pull motor cars out of mud holes.

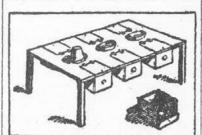
Worth \$3 a Ton. Wheat straw alone is worth \$3 per ton as fertilizer. Its value is much more when used for bedding the cow.

Legumes and Lime. The promotion of the growth of legumes is the one effect which, above all others, justifies the use of lime.

FEEDING TABLE FOR POULTRY

Platform Arranged on Which Food and Hoppers are Placed-Nests Are Placed Underneath.

I use in my henhouse a table or platform on which the drinking vessels and the food and other hoppers are placed, says a writer in Farm and Home. This table is in the middle of the house and is two and one-half feet high. Both sides of it are fitted with nest boxes that can be pulled out and closed. The boxes are a foot



Feed Table for Poultry.

square and ten inches deep. The back part of the box is boarded up three inches, which leaves an opening for the hen to enter the nest from beneath the table.

Over each nest a door is cut through the top of the table and hinged in place, thus making it convenient to gather the eggs without pulling out the box. The advantages of such an arrangement are: The eggs can be gathered without stooping, the nests are dark, no floor space is utilized, the food and drinking water are kept clean, the nests can be taken out and cleaned with little trouble.

CARE FOR INCUBATOR HATCH

Some Judgment Should Be Exercised in Testing Eggs-Remove Infertile Eggs When Found.

In caring for a hatch with an incubator some judgment should be exer cised when testing the eggs. Some people do not even try to test the eggs, fearing they will throw out some that are fertile. Now this is all nonsense. for if the eggs do not keep together in appearance you may be sure that some of them are no good. The majority of the eggs will show a daily advance. Some who are expert at the business commence testing the eggs on the sixth day, but one who is unaccustomed to the business cannot tell with certainty which are fertile and which are not until the ninth or tensh

Now and then a chick will die when a week or ten days along, and will get offensive to the olfactory nerves if allowed to remain in the incubator. In fact an egg becomes so foul as to interfere with the hatch. All such eggs should be removed, as soon as discovered.

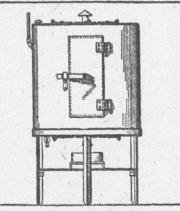
Clear eggs should be taken out just as soon as you discover them to be given to the young chicks to eat. The removal of these will keep the eggs down to the ones containing the live chicks and will make the work of caring for them less and give you a better chance to study the remaining

LATEST MAKE OF INCUBATOR

Series of Trays Supported One Over the Other Around Central Vertical Metal Tube.

The Scientific American in describing an improvement on an incubator, the invention of C. H. Osborn of St. Joseph, Mo., says:

In carrying out this improvement the invention supports a series of trays or pans one over the other



Improved Incubator.

around a central vertical metal tube which serves as an elongated chimney for a lamp employed as a heating medium. The egg trays are supported upon flanges secured to the inner wall of the body or casing of the incubator, and may be rotated thereon to facilitate the introduction of eggs through a door provided for this casing or

Winter Feed for Hens,

Plan to bury or otherwise store as much cabbage and as many turnips, beets, rutabagas, pumpkins, etc., as possible, for winter feed for the hens. Properly buried, a little later in the season, any of these will keep perfectly all winter. A plentiful supply of such things will aid materially in keeping the hens in good laying condition-vigorous, alert, full of pep and on the job all the time.

Bad Place for Eggs. Never keep eggs in a damp place.

FOR THE APPETITE FOR THE DIGESTION

FOR THE LAZY LIVER FOR CLOGGED BOWELS

STOMACH **BITTERS**

It is a tonic, appetizer and stomach remedy of well known merit

- GET THE GENUINE -

CHECK NEEDED TOUCHING UP

Bank Cashier Handled the Subject Diplomatically, But Sensitive Mr. Brushly Was Annoyed.

"This check of yours," said the large-hearted cashier to Brushly, the impressionist painter, "is drawn exceedingly well, and in composition seems to be pretty nearly perfect; but it lacks background, Mr. Brushly. But for that it would be a work of art. Your foreground is charming, but just a trifle too-well, shall we say too fanctful?"

"I don't know what you are driving at." growled Brushly. "I suppose you know what you mean, however. What kind of a background would you sug-

"Cash!" said the cashier. "A work of art like this, calling for the payment of \$50, is not wholly convincing with a sketchy little overdraft of \$2.89 on deposit to provide the necessary

contrasts in light and shade and to give the thing what we might call Whereupon Brushly, like the self-

respecting man he was, snapped his fingers under the impudent fellow's nose and transferred his overdraft to the trust company across the street .-Judge.

Knew His Father.

A school inspector asked a class of small children: "If I had three glasses of beer on the table, and your father came in and drank one, how many would be left?"

"None, sir," answered a very small "But you don't understand my question," said the inspector, and he re-

peated it again. Still the boy gave the same reply. "Ah, my boy," exclaimed the inspector at last, "it is clear you don't know

mental arithmetic." "But I know my father," said the boy, promptly.

No Need to Worry.

Say, do you know I was fearfully embarrassed last night when you introduced me to Mrs. Rich. Do you suppose she noticed my clothes needed pressing?

"I'm sure she didn't. She never notices anything unless it's out of the ordinary.'

The man who is away from home mestic trouble.

GOT HIS FURLOUGH

Private Riley Tells Just How He Turned the Trick.

Detailed to Give Instruction to "Highbrows." He Improves the Occasion to Secure the Loafing Spell He Longed For.

Our old friend Private Riley of B company of the Thirteenth regiment of foot, now stationed at Plattsburg barracks, N. Y., is on furlough, C. H. Bailey writes in the San Francisco Chronicle.

It is rather interesting, and entirely characteristic of Private Riley, the manner in which he obtained his furlough, and to be fully appreciated must be told in his own classic army English.

"Some guys," says Private Riley. have to talk an arm off to get anything out of this man's army. I get things easy, somehow, like I got this furlough. It was this way:

"They were holding that college students' camp at Plattsburg and while it was on the skipper he told me that I was detailed to go over to the students' camp and learn the boys the mechanism of the rifle so perhaps they'd get the idea out of their beans that rifles could be handled like they was hoes or clubs or somethin' like that.

"They give me a bunch of ten fellows from the highbrow universities to teach, feelin' that a man of my education an' most obvious refinement hadn't ought to associate with nobody but the upper class of college youths, an' I sure was gettin' along fine, explaining that the bullet emerged from the muzzle of a gun mostly, and that rubber goods that th' C. C. h was the reason that the hole in one end around on his person, that one of the gun was called a muzzle, and all to salute officers, colors or sa that sort of thing.

"Then it begins to rain, so we sash- th' lad, 'an' me instructions in the shays inside one of the tents, me and rection is by Private Riley. me frat chums, and I keeps right on explainin'

"In the tent which we enters, dignifled as is becomin' highbrows, there is a lad what is bonin' away hard at a meek like. guard manual.

"While I was pullin' off some of my best educated instruction stuff this hombre what was tryin' to learn the guard manual, he reads right out loud and in the manner of a man what has made a startlin' discovery, what should for it comes natural for you wa be on all the front pages of newspapers with 18-colyum headlines, the fact that a feller on guard must salute lough, he says, 'so that you on all officers always.

'Take another slant at it, son,' I says, 'an' see if it don't read that a man on guard salutes all officers, colors or standards not cased.'

"He reads again and does me the high honor to inform me in dulcet tones that I am quite and considerable right. But, he asks, what does colors cased mean? I tells him in me proud and haughty manner that colors cased means colors which is wrapped up nice and neat in their little rubber mackintoshes.

"'Ah,' says the boy from fair Harvard, 'then a sentry salutes all officers, colors or standards not cased, and most naturally he doesn't salute officers, colors or standards, cased.'

"I tells him Harvard never produced a frat brother with a better grip on th' English language.

"Recall sounds and we beats it, me goin' out last. I was follerin' close in ages. the wake of one of me frat brothers. when who do I see but th' camp commost of the time dodges a lot of do- mander comin' all togged out in wet weather trimmin's, such as raincoat, your for you.

Roofing The guarantee of 5, 10 or 15 years ply <u>Certain-teed</u> is backed by Roofing and Building Paper Mills

This roofing has given excellent classes of buildings for reasts classes of buildings for reasts except one of roofing, wood shingles, and man of roofings.

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General Roofing Manufach lew York City Chicago P

Wanted Salesmen-Candy or greene ence unnecessary; \$1000 per year and the particulars. Chriswhite Co., Dept \$100

rubber boots and all them press "I watched to see how man brother would salute the em mander.

"To me horror, me beh' strick person on military ethous college boy he doesn't salete at ambles by the camp commander and haughty an' apin' me one blooded mannerisms.

"Th' C. C. halts th' student don't you salute?' he asks, 'm must recognize me as an office:

The guard manual distinctive replies the student lad, surren cased, and you sure are cased

"Of course th' camp common turns to me. 'Where did you tray such instructions?' he asks me "'Over in that there tent,' !

"'Do you know article 81? hem "'Yes, sir,' I says, still meek, in was me role all right. 'Article ! relates to a man lying out of cur " 'Correct,' he says, 'Hereafter you want to lie, do it in your que

somewheres,' he says, without a m 'Go an' make application for a out of here before you costs this camp.' "I done it," said Private Riler, I'm having a vacation because de

intense knowledge of th' English guage an' the sense of humor d'a there camp commander. A highly cated man in th' ranks can get u thing out of this man's army."

Easy Enough. "My father has to work awill in He has to get up early every uning to see that all the clerk s

there attending to their work's little Claire Oh, my papa doesn't, sa chum. "You see, he's one of clerks.

The brakemen often follow instru tions too closely. Some men sh be permitted to forget their Tu

Fame is a bubble, but it is just well to allow someone else to

"DEAR MOTHER:- A good thing to send would be a package of Grape-Nuts, or something of that kind that is not expensive or heavy and is of good food Your son, WILL.'

> From a Canadian soldier at the battle front; reprinted from the Renfrew (Ont.) Journal.

Wherever hardships are endured, wherever big deeds are accomplished, there a food is demanded that provides maximum of value in brain- and body-building material with minimum of bulk.

In this respect no other food equals

Grape-Nuts

In building the Panama Canal thousands of brain workers as well as brawn workers kept themselves fit and in trim by eating Grape-Nuts dry from the package

Not only does Grape-Nuts supply all the brain- and bone-building, nerve and muscle-making elements of choicest wheat but also the rich nutriment of malted barley.

Grape-Nuts is highly concentrated nourishment in compact form—always ready. crisp and delicious-thoroughly baked and packaged to keep indefinitely, anywhere

Wherever time is precious and sound nourishment vital you'll find Grape-Nuts.

"There's a Reason"

Sold by Grocers everywhere.