Interior of Poultry House.

During and Following Period of

Excessively Hot Weather.

Layers and breeders, as well as

male birds, are usually lacking in

ous heavy laying or intensive use in

the breeding pen. This may account

for the failure of so many birds to

begin laying early in the winter and

continuing throughout the period of

highest prices. It will form one of the

reasons why chicken raising cannot

be practiced so successfully in the fall

of the year aside from the fact that

the colder weather would prevent the

will be evident that where winter eggs

are desired the flock must be brought

along in good condition previous 'c

and immediately following the molt-

Some of the characteristics by

which the vitality of the individual

bird may be judged are the color of

the comb, the brightness of the eyes.

the strength of the beak, the shape

and width of the head, the breadth of

the back, the depth of the body, the

Veteran Poultryman Says Try to Meet

Same Conditions in Winter That

Obtain During Summer.

Most poultrymen are familiar with

the rule of one of the veterans of the

business who, when asked how to

handle fowls during the winter, re-

ditions that obtain during the summer

terial with plenty of clean water, as

house free from drafts. The freedom

in that direction.

weather conditions.

lowis are on the roost.

not need a warm house, that is,

house artificially heated, but it is

necessary that the temperature be

kept as nearly normal as possible else

the egg supply will be shut off by a

sudden change in the weather. Care

in these respects will do much more

than is generally realized toward keep-

ing up the egg supply throughout the

winter more or less regardless of

Mark Laying Pullets.

lay in the fall, and use them in the

breeding pen for the following spring.

Keep Fowls Indoors.

Keep the birds indoors these cold

mornings until the frost is off the

ground. It will save many a chill and

prevent many cases of colds and roup.

Clean House in Fall.

house if you are to have success with

Easy to Keep Away Lice.

It is surprising how easy it is to

prevent lice in the start and also dis-

couraging to note how they will some-

times multiply in a dirty coop even

when the birds are occasionally dust-

ed. The remedy is to keep the coop

clean and well disinfected and then

fight the lice right from the start. It

is easy to keep a clean flock clean and

it takes a lot of patience to destroy

all of the lice in a badly infested poul-

Vegetables for Poultry.

crops to grow as a sideline on many

farms and a pientiful supply of these

vegetables should be raised annually

Turnips and cabbage are not difficult

try plant.

and in a broad and general way the for the poultry. They can be stored

cme feeds that they get the greater will keep all winter and furnish a por-

the quantity and the better the tion of the necessary green food.

ater variety of clean, purs whose in a clean and dry place where they

Don't forget that you must clean

The trap nest will tell all this

If possible, mark the pullets that

when they are on the range."

activity of the individual,

development of the young chicks.

"Have you fixed up the chicken house?" This question was recently grown feeds. maked at a meeting of farmers, and only one raised his hand in the affirmative.

P NO. 888,

G. A. R.

S. Rogers,

A. Rogers,

mmander:

s, Junior

E. W.

the Day;

Adjutant:

n streets.

orshipfu

Laura

Matron;

RICA .-

Oracle:

Nail down loose battens, siding, hingles or roofing. Put in whole glass where any is broken. Use build ing paper, rather than banking, for the latter is often wet from the eaves and causes dampness.

If the house is of wood and single boarded, line it with building paper ing long periods of excessively hot of some kind. The roosting chamber weather, and after periods of continu-



Colony House Used at Government Poultry Farm.

should have two or three thicknesses of paper overhead and on all sides This is commonly formed by the roof and sides of the building, and the dropping boards for the floor.

As the dropping boards are commonly 3 feet 8 inches wide, this width will admit of using three roosts, which may be made of poles or 2 by 4s, slightly rounded, nailed edgewise on crosspieces of 2 by 6 resting on the dropplied: "Try and meet the same conping boards. The length of the three rocats will be determined by the number of fowls, allowing 8 feet for twelve other words, provide grain and green food, animal food, grit and lime ma-

The roosting chamber must be made larger or smaller, according to the number of fowls kept, by a movable partition of light framework, covered with cloth or building paper. A curtain of muslin, or burlap, or some other material, is hung in front of the roosts, to prevent drafts and conserve the natural heat of the flock. By the use of the partition and curtain, the comfort of the flock may

maintained in all kinds of weather. Ample nest room should be provided, for supplying which cracker boxes may be divided and placed on supports beneath the dropping boards. Eight nests are sufficient for 25 hens. A dust box should be placed in front of a window, and kept filled with sift-

There should be a hopper for drymash on the wall; also one for grit, shells and charcoal

ed hard-coal ashos.

A water table should also be provided, so that the water may not be easily tipped over, or filled with lit ter when the hens are scratching The floor, of whatever kind, should be sovered with litter to the depth of six inches; and this should be renewed as often as it becomes foul or damp The grain feed should be scattered in

the litter, to induce exercise It is conceded that the muslin front gives the best ventilation. Too much plass will cause the house to be too warm when the sun shines, and too cold at other times. At least onehalf of the open surface should be covared with muslin, burian or some other cloth material. In a house with gable room, a straw loft may furnish sufficient ventilation. Hens will lay well in any the hens this winter

SOME ESSENTIALS FOR EGGS

Slackness of Water Supply Followed

by Decrease in Number of Eggs-

Give Variety of Feed.

At all of the egg-laying contests, any

slackness of the water supply was

at once followed by decreased egg

production. Heli may possibly live

without water, but they will not lay

many eggs. Other things they need

are sharp grit, shell and charcoal. As to grain feeds, no one kind of grain

will fill the bill, but if they have a

free range they may get nearly enough

variation, in certain parts of the sea

m but at other times, and if con-

ned, this variety must be supplied.

quality of the eggs.

RULES FOR FILLING A SILO

lewa Agricultural Experiment Station Offers Some Excellent Suggestions on the Work.

To farmers who are filling silos this year for the first time, the Iowa agricultural experiment station offers these suggestions:

The corn should be cut when the kernels are dented, or when about a fourth of the husks and lower leaves are turning brown. It should be as near maturity as possible and yet contain enough moisture to insure fermentation.

Either a half-inch of three-quarterinch cut is best because that length insures less waste and a larger pack of corn in the silo.

Slow filling makes it possible to pack the corn more thoroughly and get in a larger tonnage. With rapid filling the cost is less, but to fill to capacity the silage should be allowed to settle and then refill.

Corn should be uniformly packed in the silo and with good distribution of stalks and ears. If the sides are kept about two feet higher than the center, the silage wedges against the sides, keeps in the heat of fermentahouse that is dry and comfortable, if fed a well-balanced ration of farmtion and kills molds.

Water needs to be added when fill ing if the corn in the sile is not moist. Water must always be added when the corn is very ripe, when the corn is severely frozen before it is properly matured, or when filling late in the fall with shocked corn.

Keep the sides of the silo air-tight by filling cracks with soft clay, if the silo is wooden, or with cement if of vigor during and immediately follow-

USEFUL MILK BOTTLE HOLDER

Corrugated Strips Riveted to Interme diate Frame Hold Narrow-Necked Vessels in Position.

There are upper and lower rectangular frames to a milk bottle case recently patented by a young San Francisco inventor. Corner angles unite the two frames, and intermedi-



Milk Bottle Holder.

ate frame is secured to the corner angles. A longitudinal bar is riveted to the middle frame near the center. color of the shanks and skin, and the Corrugated strips are riveted to the intermediate frame and the longitudinal bar, these holding the milk CHICKENS RESPOND TO CARE bottles in place by acting as side supports. Various deviations of the main idea are covered with three other patents.

SERIOUS DISEASE OF CALF

White Scours Usually Appear Within Two or Three Days After and Are Often Fatal,

White scours, or calf cholers, come so soon after birth that often the calves are dead before they are considered to be seriously sick.

This disease usually appears within much sun as possible, a clean, dry two or three days after the calf is of the range cannot be supplied, but dropped. Seldom do any cases develthe scratching shed will help mightily op after the calf is two or three months old.

Be particularly careful that the The symptoms are usually failure to houses are dry and that the tempera- eat, the calf lying down much of the ure is comfortable. If the weather time, the eyes grow dull, and a pecuthreatens to be unusually cold, preliar pasty white excretion is noticepare for it with added protection in able. The calf often dies within 24 the way of covering windows and givhours. Only immediate attention will ng protection by curtains when the save it.

The disease is usually contracted by nfection through the navel cord. Prerention is better than cure.

HORSE LABOR IS NECESSARY

Many Important Factors Can Be Controlled by Manager in Making Dairy Farming Successful.

Horse labor is a necessary item on the dairy farm and should command much attention from the manager. If its efficiency drops the profits of the farm are decreased, and the profits from the cows must bear a loss in the horse-labor item. It is seen then that successful dairying is not making a success with cows alone, but profitably combining a number of factors. Man, labor and crop yields per acre are other important factors that can be controlled to a considerable extent by the manager.

Flavor of Milk Affected. The odor and flavor of milk are very readily affected by rape, cabbage, turnips, and other feeds having strong odors, and if these are used they which case there is little danger of imparting an unpleasant flavor or odor to the milk.

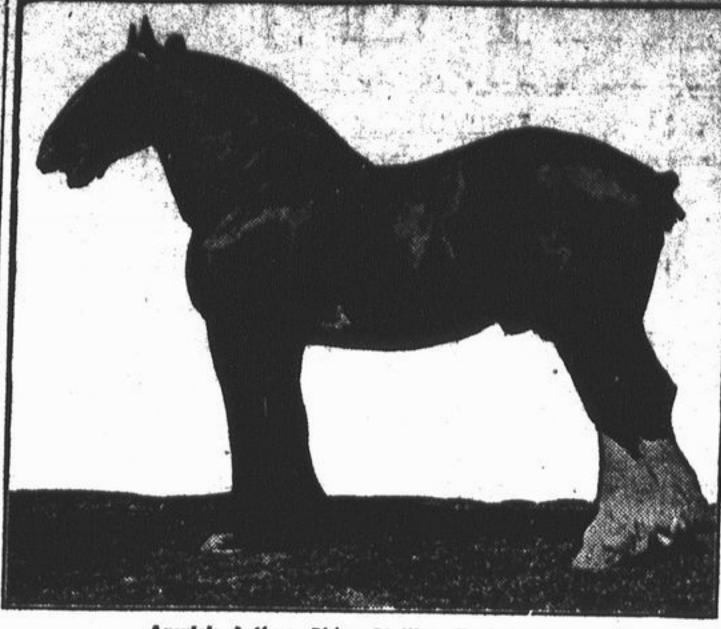
Demand for Dairy Butter.

There is always a good local demand for really good farm dairy butter. There is a sentiment connected with homemade butter, which is not attached to that made in butter factories, which impels people to buy it at something above the going price.

Damage to Milk. Milk is damaged by dirt and baceria. To be fit for use, milk must be clean. Any clean man can produce clean milk.

Keep Separator Clean. Be sure the separator is kept clean Cream is too valuable to have it injared in quality by the separator. Wash the bowl after each separation

Jee of Balt.



Anwick Arthur, Shire Stallion Foaled 1908.

The most important factor of all, for the farmer who must depend on the profits from his stock for his income, is the cost of the ration. In securing a ration which provides the nutrients called for by the standards and meets the other conditions previously discussed, lies a great opportunity for exercising foresight and business judgment on every farm where animals are fed. The farmer-feeder will consider the nutrient requirements of his animals in planning his crop rotations. Through the use of grain from corn or the sorghums, legume hay and such cheap succulence as silage from corn or the sorghums, it is possible in most sections of the country to go far toward solving the problem of providing a well-balanced, economical ration.

should be such that they will not injure its health or the quality of the product yielded. Feeds which are some roughage to distend the digessuited to one class of farm animals tive tract properly. Furthermore, for may not be adapted to others. Again, the best results the proportion of cona given feed may give satisfactory re- centrates and roughage in the ration sults when combined with certain should be regulated according to the other feeds, yet in other combina- kind and class of animal to be fed tions it may prove unsatisfactory. A and the results sought. Cattle, sheep, few examples of such conditions are and horses can be wintered satisfacfurnished in the following: Cotton- torily on roughages alone, if of suitseed meal in moderate amount is an able quality. Even brood sows may excellent feed for cattle, sheep, and be maintained chiefly on legume hay. horses, yet it is so frequently poison- when not suckling their young. In ous to pigs that feeding the meal, as the rations for growing and fattening at present prepared, to these animals animals and those at work or in milk. cannot be advised. While there is a considerable part of the ration

(By W. A. HENRY and F. B. MORRI- aged by mold, such material may son, University of Wisconsin.) often be eaten by cattle when it would poison horses or sheep. Timothy hay. which is the standard roughage for the horse, is unsatisfactory for the dairy cow, and may cause serious trouble with sheep on account of its | the heart was beating full and strong constipating effect.

> duly soft butter, while an excess of tion, as this drug is a diuretic or insoft lard when forming too large a part of the ration of fattening pigs. It is often highly beneficial to add

wheat bran or linseed meal to the ration on account of their slightly laxative effect. On the other hand, when animals are already receiving such laxative feeds as silage, pasture grass, and legume hay, the use of The feeds selected for any animal bran or linseed meal may be unwise

With the horse and with young ruminants the ration must contain always danger from using feeds dam- should consist of concentrates.

QUALIFICATIONS OF HENS FOR BREEDING

Foundation of Success in Poultry Study Made by Cornell (N. Y.) Keeping Is Ability to Rear Vigorous Chicks.

A most pernicious idea appears to The number of eggs she will lay is 834 dairy cows with full year's records apparently the only passport to the in 53 dairy herds in Jefferson county, breeding pen, regardless of develop- N. Y., it was found that 7 of the 53 ment or constitution. By all means let | herds, comprising 97 cows, were kept us have the prolific hens for this pur at a loss of \$1,335.71. pose, but let us see to it that they are | On the basis of net cost and actual

down she is not a fit subject for breeding, no matter how many eggs the net profit per cow was \$20.39. The much the animal will eat up clean, she has laid. But it does not follow that a good layer should be discarded as a breeder. That would be going to the other extreme, but what should be insisted upon is bodily derelopment of sufficient proportions and strength to indicate a breeder of robust stock.

INTERESTING HINTS ON CALF BREEDING

Heavier Calves Produced From Cows in Their Prime, According to English Test.

From careful records taken of 19 Shorthorn cows it was found by an English agricultural society that the average gestation periods of cows bearing bull caives was 288.91 days; of cows bearing heifer calves 283.75 days. The longest period in the former was 297 days, and the shortest period 280 days; in the latter 293 and 274. The average weight of the bull caives was 89.45 pounds; that of the heifer 82.5 pounds. It was found that the longer the period the heavier the calf in each case.

It was noted that the heavier calves are produced from cows in their be allowed to trample over it and it prime: that is, ranging from five to seven years of age; after that age the calves appear to become smaller at birth. It is thought safe to take an average of 285 days as the period of gestation and 84 pounds as the average weight of a Shorthorn calf at birth.

Excellent Addition to Ration. Tankage, the material made by the big packing houses, is an excellent addition to the hog ration. Fed in the sorn, it will bring the fattening hogs along in fine shape.

Cull Our Debilitated Mana If any of your hens seem to have start the youngsters on the

TESTS OF COST OF **MILK PRODUCTION**

Experiment Station With 834 Cows in 53 Herds.

From a study made by the Cornell be gaining ground in regard to the (N. Y.) experiment station of the qualifications of a hen for breeding. costs incident to milk production for

receipts, 161 cows, or 19 per cent of The foundation of success in poul- the total number, caused a loss to try keeping is ability to hatch and their owners of \$1,799.87, or \$11.18 per rear strong, virile chickens, and cow. The average production was these can only result from strong, 6,621 pounds of milk and 241 pounds | more sanitary condition. well-developed and well-cared-for par- of milk fat. The milk was produced Feed may be wasted when it is fed at a net cost of 1.31 cents, and the in the mangers in excess of the ani-Therefore it | milk fat at 33.3 cents per pound.

The average selling price of the easily preventable, for the feeder if milk was 1.52 cents per pound, and net cost per cow was \$80.24 and the receipts were \$100.63. The average hay or other coarse feed, a rack of cost of feed per cow was \$51.57 and the kind shown in the illustration is the labor cost \$23.12. The average handy and prevents waste. More simcost of delivering 100 pounds of milk ple racks are often constructed on the 2.14 miles was 11.7 cents. The profit inside of a hog house by placing them from cows yielding 10,000 pounds of against one of the sides of the build milk a year was 51 per cent greater ing or adjoined to the pen partition. than from those yielding 6,000 pounds.

COVERED SHED FOR STOCK GAINS FAVOR

To Obtain Best Results Cement Floor Should Be Provided-Shelter for Animals.

One of the most popular methods caring for manure is the covere shed. To obtain the best results the shed should be provided with a ment floor inclined at each end to allow a spreader to be run in at end and out at the other: the sides should be sufficiently high to contain all the manure to be stored.

The manure should be placed evenly over the floor, and that from horses. cattle, sheep and hogs mixed to prevent, as far as possible, aerobic fermentation, and consequent loss of nitrogen. The cattle in the yard should may be worked over by the hogs without much danger of loss.

In addition to being a storehouse for manure, the shed furnishes a shelter for farm animals which will compact the manure so that the serobic fermentation responsible for the loss of nitrogen will be largely prevented.

Unprofitable Hog Practice. Most of the hogs in this country are raised by the "by guess and by goal method"-that is, the breeding sows any old thing that comes handy, any old time, without regard to condition at farrowing time, or when



stedicines Are Administered by Pee Without Knowledge of Actio Study Symptoms of Animals.

Frequently drugs are administered

by people without any knowledge of

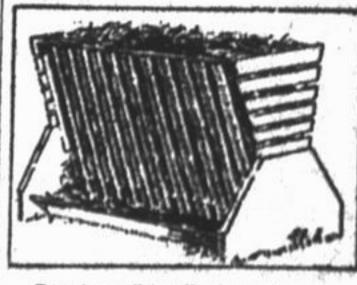
their action. One individual only recently asked what he should give his horse when aconite and nitre had failed to cure. It is always best for one to know the action of a drug be fore it is administered to live stock. thorough study of the symptoms of the animal should be made before any drugs are given. Just because certain drugs have succeeded in some neighbor's horses, there is no reason they will cure yours. To illustrate-a horse is suffering from colic. A dose of opium would be correct to give if it is spasmodic colic, while if the patient has impaction of the bowels a dose of opium would only pack the bowels the harder. A dose of aconite should never be given when the heart is weak and slow, for the reason that aconite depresses the heart and will cause death. On the other hand, acquite would be the proper drug to give when and very rapid. A common mistake Feeding cows a heavy allowance is to give horses sweet spirits of nitre of ground and soy beans produces un- when suffering from frequent urinacocoanut meal makes the butter too creases the flow of urine. It only ag- John." hard. Péanuts and soy beans produce gravates the trouble in this particular

> In diseases of the respiratory tract when the high fever has caused constipation one should never use aloes on account of the danger from superpurgation. Raw linseed oil is preferable, as it is much safer.

CONCRETE FLOOR IS FAVORED

Much Waste of Feed Can Be Prevented by Average Farmer-Reughage Rack for Swine is Shown.

There is a great deal of feed wasted on the average farm each year, but so little is lost at a time that fon seldouf notice it. If you would take the time to count up what is knocked out of the troughs by the animals and trampled under foot in one mouth's time you would be so surprised Mt the large



Roughage Feed Rack for Swine.

quantity that you would all take ster to be more careful in the future. One of the most common ways o wasting feed is to feed it upon the ground when the surface is wet or

soft. Feed scattered about in this fashion will soon be tramped upon and buried under the mud. Pigs, especially are wasteful of feed given to them in this way, but many feeders have real ized the loss and have prevented it b building concrets feeding floors which will not only pay their cost in the feed they save in a few years, but enable the quarters to be kept in

he is observing will know just how

For feeding alfalfa, clover, soy bean

DAMAGED WHEAT FOR SWINE

Greater Gains Obtained in Tests in Feeding It Alone Than With Corn in Fattening Hogs.

The grade and market price of parof the 1915 wheat crop has been so much reduced by sprouting in the shock that it is not too high for hog feed. Recent feeding tests by L. A. Weaver at the Missouri experiment station have shown that wheat fed alone gives greater gains in fattenings hogs than either corn alone or corn mixed with wheat. The addition of tankage to the ration resulted in still more economical gains, especially during the early part of the feeding period.

If ground, the wheat is better digest ed and three pecks produce as much grain as a bushel of unground wheat, both being soaked.

Pig Feeding Experiment.

At the Ontario station, 100 pounds of meal, when fed to 40-pound pigs, proved equal to 406.9 pounds of skim milk and to from 37.6 to 48.5 pounds of tankage, depending upon the grade used. The skim milk was fed in the proportion of about one and a half pounds to one pound of meal, the ter age one pound to about six pounds.

hours daily. Result: Better lambs

A boy thinks when he

age of twenty-one he'll have

tor in the city college. band," replied a former De

cook in leaving

"What's the matter? Don't we her enough?" "She says it's very strange every time she has an a

BABY LOVES HIS BATH

With Cuticura Soap Because &

These fragrant sup Soap to cleanse and purify, the fective. May be used fre

Sample each free by mail Address posteard, Cutiours, De Bocton. Sold everywhere, and

her identity, who for months has money through Le Figure of P to the French army, and most ularly to the aviation corps. Figure received this letter for "My savings are all mone.

inclosed with the letter

Now that Mr. McKen or shipowner, but after a hi fee-house keeper. Of Lloyd's known beyond the fact that he

curs in a poem. "The Wealthy When to Lloyd's coffee house to

To read the letters and attend the in 1710 Steele dated so of the Tatler from Lioyd's and in the Spectator.

TURN OVER TIME When Nature Hints About the

When there's no relieb to fond all that one eats doesn't se turn-over in the diet, for the ture's way of dropping a bint th food isn't the kind "For a number of years I railroad work, much of it h

were our busiest; and esting and too quickly of food such taurants, together with the habita, were not long in giving duced my weight from 205 to

good. It seemed the more poorer I got and was al

our automobile is in the repair