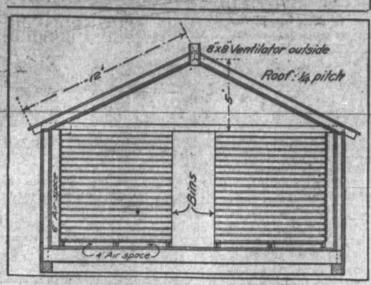
ERECTING SWEET POTATO STORAGE HOUSE



Cross Section of a Sweet Potato Storage House.

to involve considerable expense, it has been calculated that for a well-built

heat enough to cure from ten tho

ouse, one good stove will provide

to twenty-five thousand bushels of po-

By careful storage in this way grow

ers will find it possible to put their

product on the market when the de-mand is at the greatest, usually from

the middle of December to the middle

of March. Careful grading and pack

ing will lessen loss from decay and

secure better prices. In fact, to quote

from the bulletin already mentioned,

With the growing demand for sweet

potatoes there is every inducement for

the southern farmer to adopt better

methods for growing and marketing so

as to make the sweet potato a more

important money crop." It is as a money crop that the southern farmer

should regard the sweet potato. A few

early plants, however, should find a

place in his home garden for home

consumption. Even, moreover, if it is

not desired to grow sweet potatoes on

a commercial scale, by a little atten

tion to the principles of storage which

have already been discussed, the farm-

er will find it quite pasy to keep a

sufficient supply in good condition

throughout the year for the use of his

COTTONSEED AS FERTILIZER

Contains Nitrogen, Phosphoric Acid

and Potash, and Has Value of

\$14.96 Per Ton.

The following answer was given to

an inquiry concerning the value of

cottonseed as a fertilizer and as feed

The average composition of cotton-

seed is as follows: Nitrogen 3.13 per

cent, phosphoric acid 1.27 per cent,

potash 1.17 per cent. With nitrogen at 20c a pound, phosphoric acid at

6c a pound and potash at 6c a pound a ton of cottonseed would have a

fertilizer valuation of \$14.96 per ton.

I am unable to tell you, however, whether or not this fertilizer would

give profitable results on your black

hog wallow land. Land of this char-

acter usually needs vegetable matter

more than it does fertilizers. That is

to say, it needs applications of stable

manure or a rotation of crops in which

a legume, such as cowpeas, clover,

etc., is grown to be turned under or

grazed off. Sometimes it reacts to

fertilizers and sometimes it does not

you to use two pounds per day of

cottonseed meal for your horses and

mules to take the place of the more

CULTIVATION OF SOY BEANS

When Early Varieties Are Used Good

Crop of Forage May Be Obtained

-Methods of Seeding.

In a general way, soy beans should

receive the same culture as the or

dinary field bean. Prepare the land

so that a good root bed will be pro-

vided and have it smooth and free

from clods. Seed may be put into the

ground as early in the season as

practicable, but the best results will

be obtained if seeding is postponed

early varieties are used, a fairly good

crop of forage may be obtained, if

planted after some of the earlier

small grains, such as rye and barley

have been harvested. In this way,

beans in between the rows of corn

sired to harvest. If it is wanted for

hay or green fodder, sow either

There is considerable variation as

to the amount of seed sown per acre

Some farmers use only half a bushel

while others prefer twice as much

until the soil is well warmed.

small grain and the other

expensive corn.

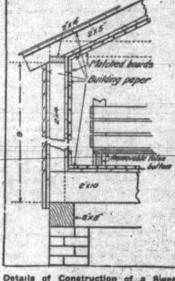
by G. S. Fraps, state chemist of

ourn family.

Prepared by the United States Depart- | age period. Although this may seem

With a home garden to furnish him fresh vegetables and a well managed poultry flock to provide meat and eggs for his own table as well as a surplus for the market, the farmer will have the satisfaction of feeling that he has very considerably reduced his cost of living. He can therefore turn with a freer mind to the production of a money crop.

As a crop of this kind the sweet potato is yearly becoming of greater importance throughout the South. Within the last ten years the value of this crop has increased 80 per cent, and with better methods of storing and marketing it is estimated that even this increased value could be doubled. Such improved methods, moreover should make it possible for the southern family to store sweet potatoes for its own use throughout the entire year, and this, indeed, is a matter of prime importance to the housewife. In other sections of the country the Irish potato forms an important part of the meal three times a day; in the South climatic conditions have made this impracticable and some other substitute has to be found. Hitherto there have been difficulties in the way of using sweet potatoes for this purpose, but now that the problems in connection with their storage have been solved these difficulties are to a great measure



Details of Construction of a Sweet Potato Storage House.

are removed. In a new Farmers' Bulletin No. 548 published by the United If cottonseed meal gives good results States department of agriculture un- then the cottonseed ought likewise der the title of "Storing and Market to give good results. Whether you den thaws the fruit should be looked ing Sweet Potatoes," an account will should exchange for meal or not debe found of the latest discoveries in pends upon the basis of exchange. this field

Sweet potatoes have always been more than twice the fertilizing valuedifficulty has been to distribute the ing value, and it would probably pay supply throughout the year. Growers either rushed them out for sale at digging time, flooding the market with ungraded, badly packed, and unattractive stock or else stored them in outdoor pits or banks where a large portion decayed. The result has been the loss of a large percentage of the crop and low prices for that portion which did reach the narket.

The remedy for this situation, say experts in the department of agriculture, is the marketing of crops from storage houses. To keep sweet potatoes in good condition they must be well matured before digging, carefully handled, well dried or cured, and kept at a uniform temperature after they are cured The storage house is de signed to make possible the last two requirements. Detailed plans for the construction of such storage houses will be found in Farmers' Bulletin No 548 which has been already mentioned. On many farms in the South buildings such as abandoned tenant houses, which with a few alterations, two crops may be seemed from the could be used for this purpose, are same field in a single season, one of could be used for this purpose, are already in existence. The cost of the necessary alterations or of erecting a beans. Another practice is to drill the new house, varies, of course, too much with local conditions to be stated with after the last cultivation. The meth any accuracy, but in general it is od of seeding will depend, of course, thought the outlay need not be very upon the kind of crop which it is de-

When the potatoes are first stored in these houses a temperature of 80 broadcast or with a grain drill, but degrees to 80 degrees Fahrenheit with plenty of ventilation is maintained for from ten days to two weeks in order feet apart. to drive off the moisture. After the potatoes have been thoroughly cured in this way, the temperature is grad- in the different parts of the country. ually reduced to 55 degrees Fahrenheit and kept as near that point as possible during the remainder of the stor- or even more.

Poorest Poultry Grain.

Rye is the poorest of poultry grains. Corn and buckwheat should be fed

sparingly, as they are very fattening.

Wheat leads as a well balanced food

and barley as a close second. Feeding too much buckwheat has a tendency to

produce a white skin and light colored

Easy to Diversify

crots better than any other class of

yolks in eggs.

Best Farm Hen

The farm hen is the hen that yields a profit in the egg basket rather than the one that takes off the blue ribbon n the show. Sometimes the two are combined in the same bird but not al ways.

Care of Earth Floors.

If you have earth floors in your poul try house, after scraping off the top The dairy farmer can diversify his layer douse the ground thick with total better than any other class of some disinfectant before putting on the new layer of fresh dirt or gravel.

LIVE-STOCK-FRUIT-DAIRYING-BARDENING-FIELD CROPS-SILOS-PIGS

FARM New Wrinkles Progressive Agriculture

Making the Farmers' Profitable

TOLD IN AN INTERESTING MANNER EXPRESSLY FOR OUR READERS

If Trees Are Not Protected Against Mice Much Damage Will Result Sort and Pack Apples.

As we look out over the orchard these days, everything seems to be quiet and peaceful on the surface; but if there is deep snow on the ground thousands of mice are probably busy making their tunnels from their nests to the young trees to breakfast off their tender bark. If you have not protected the trees by putting paper or wire screens about them your reections will not be altogether pleasant

If you have apples to sell and they have not yet been properly sorted and packed, now is a good time to do this work... Sort according to size and color and pack in small boxes with paper be tween the layers, particularly if you have private customers, as most p



Good Way to Use Dead Trees-Fine Work for the Winter

ple like them better that way than when packed loosely in barrels.

Be particular to select good apples of the same size for the top layer, but be just as particular to see that those in the middle and the bottom of the box are equally good.

Second quality apples should be packed in the same way, in boxes by themselves, and the culls can either be made into cider or worked up for family use or sold in the market for just what they are. If the second grade apples and the culls are packed in along with the best you will get nothing more than the price for culls, as buyers always base their offering on the poorest quality of fruit.

If the fruit is stored in the cellar, it

must be well ventilated and perfectly dry, although we have found that ap ples stored on a cement floor become too dry and are apt to shrivel. We be lieve that there is nothing better than fruits of all kinds, providing the drainage is perfect.

If the cellar becomes damp at sudover carefully and all imperfect specimens sorted out and the fruit elevated Good cottonseed meal has something two or three feet above the floor.

If you are going to plant a new orchard next spring make your selections now and give your order to the nursery along in February so that it ing. may be delivered to you when wanted. By getting in your order early you are more likely to get good trees and shipments will be made to reach you at planting time.

Best Time for Pruning

There is a lot of truth in the old saying that one should prune when the knife is sharp. Spring is the best time for pruning, as at that time the wounds heal up most quickly. If the trees are making excessive growth a pruning early in July is good, as there is not likely to be any new growth starting as the results of cutting out the old. There is also little danger of recurring growth if just the water sprouts are cut out now.

Best Keeping Qualities.

For best keeping qualities, apple should be picked as soon as they are well colored and before they are over-However, if picked too green they will shrivel, while if allowed to me too ripe they will become dry and mealy.

Vaccination a Fake.

If any tree doctor offers to vaccinate your trees to repel insects and disease set the dog on him and drive him off the place in a hurry. He is a faker and his treatment is no good. It may hurt the tree; it certainly will not be of benefit.

Pear Trees Run High. Young pear trees are inclined to run up high. They should be headed in severely every year while young. Bearing pear trees need but little pruning.

Fried Cabbage Shave very thin enough cabbage to dll a quart measure. Put in granite stewpan, sprinkle with sait and pour on two cupfuls boiling water. Cook rapidly until water has evaporated Then add two tablespoonfuls milk, of butter, a dash of pepper and fry brown.

The Real Thing. An aim in life is the only fortune worth the finding, says Stevenson; and it is not to be found in foreign lands, but in the heart itself.

PICKED UP IN THE ORCHARD GOOD FARM BUTTER MAKING

Greater Attention Should Be Given to Details Concerning Factors Affecting the Quality.

(By J. KEITHLEY.)
The following few brief instructions will prove of great assistance to farm butter makers:

Churn at a temperature that will give a firm, flaky granule in the but-ter. This temperature varies slightly ter. with the season, but ranges from 52 degrees to 62 degrees F. The use of a thermometer and intelligent observation, as result of a few churnings, will enable the butter maker to determine the proper temperature at which to churn. Churn should be stopped when butter granules are large as corn kernels or peas. Time required for churning should be 25 to 30 minutes. Use clear, pure water for washing the butter. It should not be more

than three degrees colder or warmer than the butternilk. Use amount of water equal to that of the buttermilk In a barrel churn, reverse 12 to 15 times in washing. Weigh the granular washed butter and salt at the rate of three-fourths ounce to one ounce per pound. Be sure the salt is well pulverized and

sift it evenly over the granular butter

before any of the moisture is worked

Work the butter sufficiently to distribute salt without injuring the grain or texture. Determine working by 1, appearance; 2, texture; 3, grittiness Butter, when sufficiently worked, should present a firm, glossy appear ance. The texture should resemble the broken end of a steel rod. There should be no grittiness due to the un evenly distributed or undissolved salt. This can be determined by taking a small piece of butter between the teeth and biting into it repeatedly; any grit-

tiness will soon be observed. Insuffi



Working the Butter.

an earthen floor for storing apples or cient working is generally shown by a mottled appearance in color on the cut surface. This is largely due to an uneven distribution of salt. sults in a salty condition and injures the keeping quality. The aim of butter makers should be to produce a high-grade article that is uniform week after week in flavor and compomethods in ripening, salting and work-

KEEP SALT HANDY FOR COWS

Maintains Health of Animals and En courages Heavy Milk Flow by Promoting Digestion.

Experiments have proved the average milk cow requires about an ounce of salt per day. Heavy milkers should have more. Keeping salt where the dairy cows can reach it at all times maintains their good health and encourages a heavy milk yield by pronoting thorough digestion and as ilation and having a cooling effect on the whole system of the animals, at the same time making it easier to bring butter of a superior flavor and color at churning time.

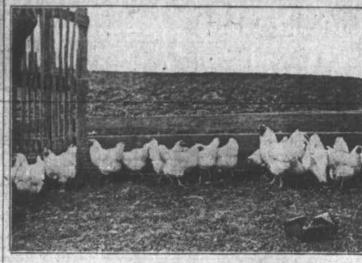
SOME GRAIN IS NECESSARY

Cow Will Get Through Winter in Excellent Condition If Given Few Ears of Corn Each Day.

The cow that is to become a moth er should not be allowed to get poor and weak during the winter months It is practically impossible to get such a cow through the rigors of winter in good condition wthout a grain feed. She may not need a great amount of grain, if she has plenty of forage that is nutritious, but she will need four or five ears of corn two or three times a day. Then she will get through the winter in fine shape and have good flesh and plenty of strength at calving time.

Question of Bacteria. The question of sweet and sour milk, of clean and dirty milk, is purely a question of bacteria. There will be a certain amount of bacteria in all milk, but the kind that makes it sour or unfit for use is the kind that comes in from the outside.

Upset Cow's System When a cow is supplied very irregularly with feed either in quantity or time of feeding it naturally upsets her system and causes a serious falling PRACTICAL NOTES OF THE POULTRY YARD



A "String" of Wyandotte Hens.

house, to make things comfortable for

Some people imagine that if they

give their chickens skim milk, water

is not necessary. This is a mistake, as milk turns into solid food almost

as soon as it reaches a bird's diges-

tive apparatus, and water must al-

If the poultry house is perfectly dry,

and by that we mean the ground un-

der and above it, the chickens will

At the high prices of grain the man

who has to buy all of his feed must

figure very closely and make the most

of every pound of it in feeding his

poultry, else he will come out at the

little end of the horn in the spring.

charcoal to correct slight bowel trouble in chickens.

necessary in the poultry house as the

sprayer if the fowls are to be kept

It is not stretching the tr..th to say

that if the farmers marketed their

poultry in the best possible condition

their receipts would be increased one

third. Neither is it stetching the truth

to say that less than 10 per cent of all

the poultry marketed is in perfect

condition when it reaches the con-

If you are selling eggs for hatch-

ing, a visit to the best breeding farm

you can easily reach, will pay you

well. Observe closely the methods fol-

lowed there, and then improve on

Always ship eggs in baskets or

cartons made for the purpose and

The pullets do not need a nest

egg as a pattern, but one or two

dummies placed in the nest will show

Ordinary Pasteboard Box and Small

Lamp Can Be Arranged Without

A simple outfit for candling eggs

Much Trouble or Expense.

can be made out of a small hand lamp and an ordinary pasteboard box suffi-

ciently large to be placed over the

lamp, after the ends have been re-

moved, without risk of fire. In order

to supply air to the inclosed lamp, notches should be cut in the edge on

which the box rests. A round hole is

then cut in the box at the level of the

lamp flame and the candling done by

holding each egg against this hole

while the rest of the room is in dark-

veals the contents of the egg, and

those that show any defect can be re-

OBJECT OF A REAL FANCIER

Does Not Push His Fowls to Lay In

Winter, But Is Perfecting Some

Breed for Shape.

You never see the real fancier push-

and color, and he cannot afford to push

When he gets close to his type it mat-

thing he has as yet secured in the

Use Medium Size Eggs.

dium size and run an average in re-

gard to color. An unusually small or

unusually large egg should be discard-

ed. A uniform lot as to shape, size

Provide Grit and Charcoal.

During the winter months, or while

fowls are confined, supply them with

and color will bring the best result.

Eggs for setting should be of me

ing his birds to lay in winter.

The light from the lamp re

them where they ought to lay.

never in dirty old boxes, packed in

There is nothing better than ground

A perforated dust can is just as

the hens these stormy days.

not suffer from the cold.

ways be given.

free from insects.

them all you can.

sawdust or bran.

sumer.

ness.

jected.

type wanted.

Poultry raisers living in towns and the snow from the path to the poultry ities can get more for their eggs house, to make things comfortable for selling them to private customers A hundred post cards or a little advertising in the local newspapers. stating that you will supply eggs the year round at a stated price, will bring plenty of customers.

Roup, one of the most troublesome diseases among chickens, is almost always caused by damp quarters. Keep the quarters dry and warm, and the yards clean and roup will not trouble you.

Some people think it is "cute" to let the puppy run through the flock and set the hens to flying. Maybe it is, but the egg production will always fall off after such a perform ance.

Worms and bugs in the field and garden have now gone into their winter quarters, where the hens can't reach them, and to take their places meat, meal and cut bone must be supplied, if you would keep the hens strong and healthy

Are the winter quarters for your laying hens to be the old dirty, lousy, smelly house that has been used without cleaning or disinfecting? You need not expect many eggs from such a place, no matter how good your hens are.

Keep ground charcoal on hand and throw a handful into the drinking pans once or twice a week.

A few drops of tincture of iron put into the drinking water is also a good thing for the hens, and some people believe that it prevents many minor diseases. Even if it does not it will do no fiarm. Chickens have no sense of affection

for their owners, but they will repay kindness of warm, dry quarters and good food and clean water by laying more eggs. The hen is all business.

A hopperful of bran, placed where the hens can get it at all times, is an excellent addition to the food in **OUTFIT FOR CANDLING EGGS**

While it is desirable, it is not always necessary to start in the chicken business with a flock of pure Buy the best hens you can afford, and then spend as much more as you can afford for a pure bred cock.

If you have some birds in your flock that you think will line up well with the winners at the poultry show, and you are in the business of selling eggs for setting, do not hesitate to exhibit them, but it will be well to have some expert poultryman judge them first. He may save you some disappointments, and then he may find birds that are more likely to be prize winners than the ones you have selected yourself.

There is many a farm where the poultry is considered an unimportant offshoot of the business, but which if cultivated as it should be would produce more money than all the crops

If the fowls have to break through a coating of ice to get water these frosty mornings they will not take as much as they need. The water should be slightly warmed on all cold days.

Do not allow the laying hens to become too fat as they not only become lazy but are apt to become egg-bound. Laying hens need a bulky ration such as cut steamed clover or alfalfa meal. They should also have plenty of vegetables.

We would rather allow our hens to roost in the tree tops as long as they can keep dry, than in a damp stuffy poultry house, even in the coldest weather, as they will suffer less.

It is not a good plan to wait until spring to buy your breeding stock If you want a well-bred rooster for instance, look around among the breeders and pick out one that is fit to show at the poultry exhibition. If you wait until he goes to the show and wins a prize, you will pay twice

or three times as much. Field corn parched crisp, in fact nearly to a charcoal, is always relished by the hens and is a valuable addition to their winter food Of course it is unpleasant to leave suitable grit, charcoal and green stuff

a warm fire and go out and shovel in addition to the regular grains

MATERIALS TO MAKE SHELLS | sunny part of the yard or house. If

Articles Containing Lime Must Be Given in Liberal Quantities-Do Not Overlook Grit Box.

the hens may not readily recognize them, or they may get in the babit of tilizer, and its fertilizing constituents eating eggs. Oyster shells and clam shells pounded up fine must also be fed and in liberal quantities, for all at \$20 a ton. of them are needed to provide the hen with material to make shells. Do not confuse the grit box with the box containing the shell-making material.

Mix the ingredients if desired, but see that there is enough of sharp bits end of the first week and again about of stone, broken flower pots and three days before the hatch is done, crockery, fine cinders and the like in dusting it freely into the feathers and the mixture so that the hens may ob- around through the nesting material. tain sufficient to grind the food they. consume. Then bear in mind the box of dust: make this of fine road dust in which is mixed a little lime and keys are corn, wheat and oats. An occonsiderable insect powder. Have sev-eral such dust boxes if the flock is of although turkeys do not always take derable size, and set them in the kindly to it.

the dust boxes are liberally supplied the hens will give one material help in keeping out the insects.

There is no possible objection to seeding egg shells to hens, provided they are broken in small bits so that try manure. When rightly preserved. poultry manure is a concentrated ferwill rank with many of the commer cial fertilizers on the market that self

The Dust Bath.

A good dust bath should be conven ient and in addition a good insect powder should be used freely at the

Grain for Fattening Turkeys The best fattening grains for tur-



CHEAPEST FEED FOR WINTER

Hay, Straw and Fodder Cut and Mixed With Bran, Crushed Corn and Cohmeal is Relished by Stock.

Cutting or grinding hay, straw and fodder add nothing to their nutritive value. But with proper arrangements it is more convenient to feed, and when mixed with wheat bran and crushed corn and cobmeal horses. cows and sheep will eat cut fodder and wheat straw as greedily as the best of hay. Where there is an abundance of fodder and straw this is a very economical method of wintering stock the hay may be sold and the money used for buying the bran and oil meal. One bushel of fine-cut fodder-say about eight pounds-and one quart of corn chop and one quart of bran and one pint of oil meal mixed with warm water during the cold weather three times a day, is a good allowance for a cow not giving milk that will come fresh in spring. giving milk should be allowed more bran and corn chop. The usual allowance is three pints of corn chop, two quarts of wheat bran and one pint of oil meal, mixed with a half bushel of equal parts of mixed hay fodder and straw, given three times a day. Coarse fodder should be split and cut fine; some of our milk farmers are using s



Beef Cattle Grazing on Virginia Pas

machine that grinds the fodder. Practical feeders estimate that fodder, straw and second quality hay cut fine and mixed with meal, is worth \$8 to \$10 per ton, as there is no waste.

Horses should be fed according to their work. One bushel of cut straw and two quarts of corn chop may be regarded as equivalent to good enixed

If the horses are doing but little work they will do well on this mixture, being given all they will eat up clean. If at steady work give two or three quarts of oats or six to eight ears of

corn three times a day in addition Sheep should be given a little grain once a day. Have roomy shed and hard, dry earth floor. Wheat straw, mixed hay and corn fodder, fed in

moderate amounts, will keep them in thrifty condition.

IMPACTION IN WORK HORSES

Animals Are Turned Out to Old Straw Stack and Allowed to Shift for Themselves.

(By DR. I. E. NEWSON, Colorado Ex-This is the time of the year when impaction of the bowels is most com mon to work horses. The animals having little to do are turned out to fancier is perfecting some breed, or a an old straw stack or coarse alfalfa and allowed to shift for themselves. certain type in some breed for shape Owing to the cold weather they drink little water and the coarse food not for anything out of the line he wants. being properly moistened clogs the intestines. This is more liable to be ters not to him how old his fowls, or the case if the teeth are not in firstif they do not lay two dozen eggs a year; he knows the eggs are likely to class condition, for then the food is not finely ground in the mouth. Lookcontain something better than anying after the teeth and giving an or casional bran mash will materially reduce impactions.

COMPOSITION OF EWE'S MILK Different Breeds Show Some Variation

in Fat Content-Lamb Needs Good Laxative at First.

An analysis of ewe milk shows it to be very high in fat content. The different breeds show some variation in this regard, and there is a considerable variation in the fatty content of the milk of a single ewe at various times. All ewes give richer milk immediately after the lamb is born than they do later on.

The percentage of fat sometimes runs as high as 11 per cent at this time. Nature made this arrangement, no doubt, because the lamb needs a laxative at first to set its digestive apparatus in motion and free it of feces that have been collecting during its pre-natal growth

Crop of Lusty Lambs. Proper feed and care will insure a lusty lot of lambs in the spring.

Attention Required by Sheep Sheep require little attention other than close oversight, excepting lambing and shearing time when they cannot have too much attention.

Working a Brood Mare. Keep the brood mare working moderately nearly up to the time of foal-

Well Bred Farmer. No well bred farmer ever contents himself with scrub stock or poor