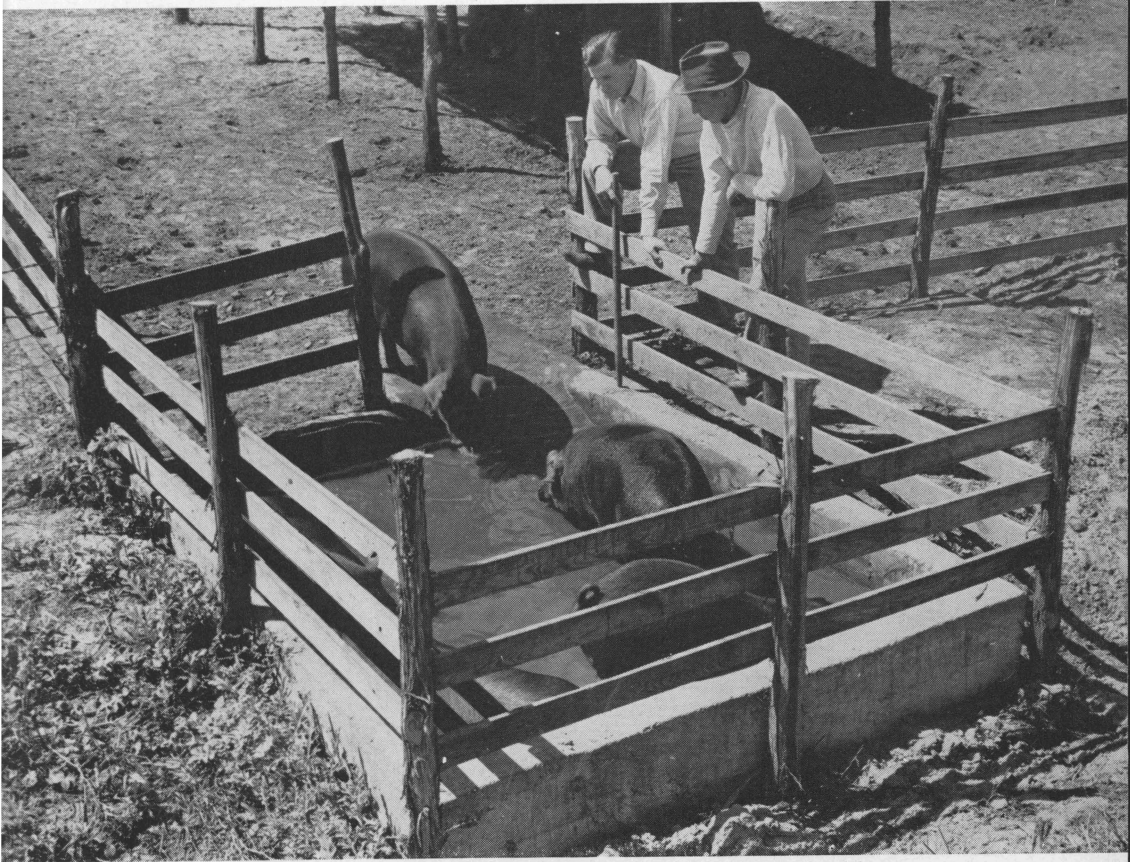


Hog Lot Equipment for Texas Farms



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Hog Lot Equipment for Texas Farms

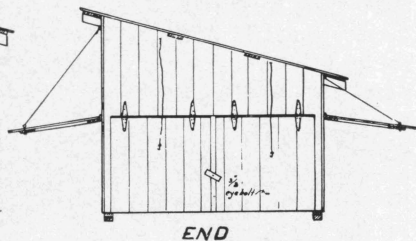
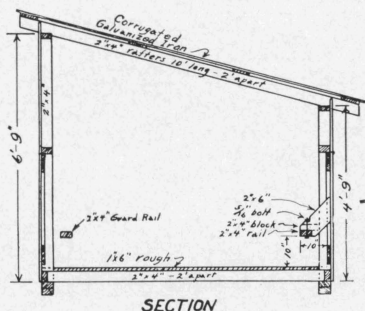
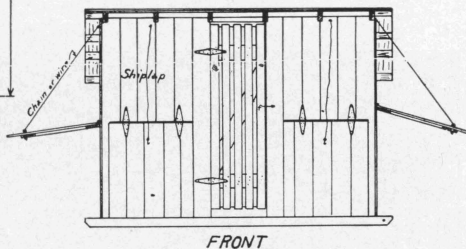
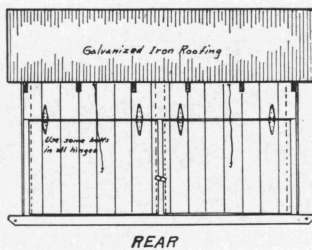
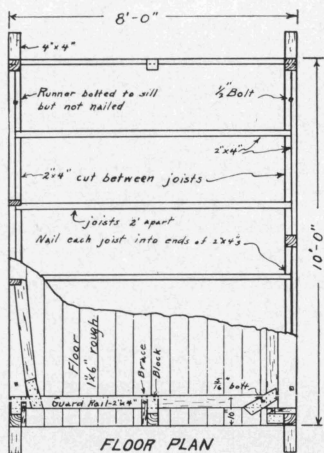
By

E. M. Regenbrecht, Swine Husbandman
M. R. Bentley, Agricultural Engineer
Extension Service, A. and M. College of Texas

THE BEST WAY to make hog raising profitable in Texas is to graze the hogs upon pastures prepared especially for them, supplementing the green food with home grown grain, skim milk, and other feeds. Cultivated pastures properly managed will greatly cheapen the cost of producing hogs and at the same time tend to prevent worms, unthriftiness, diseases and other ailments common to hogs. This is all a part of good management, which in turn is greatly aided by the use of suitable equipment. The purpose of this bulletin is to discuss, and to give methods for constructing some of the equipment needed for growing and fattening hogs cheaply in Texas.

Build Movable Farrowing Houses

Proper housing is an important factor in the successful raising of hogs. Shelter is of utmost importance at farrowing time, and therefore hog houses should be so constructed that they will make good farrowing houses. Individual farrowing houses should be so constructed that they can easily be moved. Before the sow farrows, the house should be moved into a field that has been planted to a grazing crop. If the house is so constructed that it cannot be easily moved this important point of successful hog production will frequently be neglected, and as a result the pigs will be farrowed on unsanitary ground and will soon become wormy. Farrowing houses should be large enough to permit the sow to approach the bed in a natural way so that she will not mash the pigs. A farrowing house should be not less than eight feet by eight feet in size.



Shed Roof Type Portable Farrowing House—Blueprint No. 162

The farrowing house plan shown above has given satisfactory results in Texas. Note that this house is so constructed that all sides can be raised to provide good ventilation in warm weather. A large number of openings, of course, increases the cost of the house. This house can be cheapened by closing one or both ends. If only one end is closed it is best to close the west end, because in summer the west doors should

be closed each afternoon to prevent the sun from shining in. Therefore, the openings on the west end are not of as much value as the others.

Pig Guard Rails

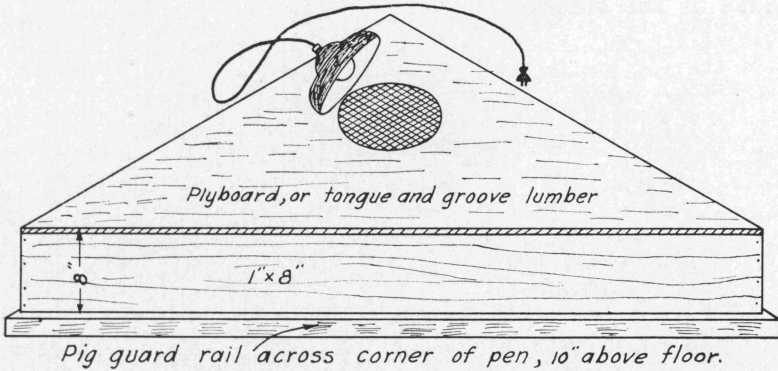
Pig guard rails should be provided on all four sides of the farrowing pen. The lower outer edge of these guard rails should be about 10 inches above the floor and 10 inches from the wall. When placed in this position the guard rail provides enough room for the pigs to go under it, even though some bedding has accumulated.



Corner Guard Rail

Guard rails placed across one corner of the house give good results. Pigs can easily be trained to stay under the guard rail if a bed made out of straw is put under the guard rail. New born pigs should be placed under the guard rail as soon as they are through nursing. If the caretaker runs them under the rail a few times they soon learn that the rail is their protection.

Electric Pig Brooder



Electric Brooder in Corner of Pen

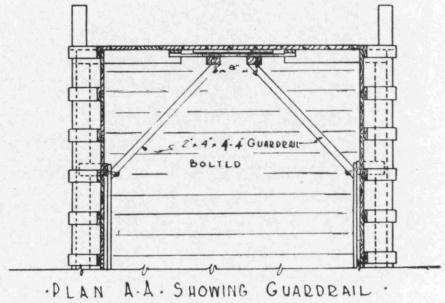
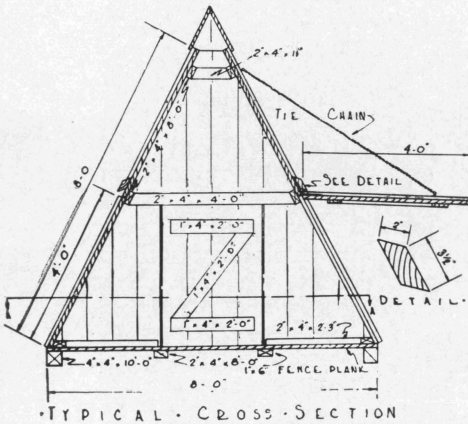
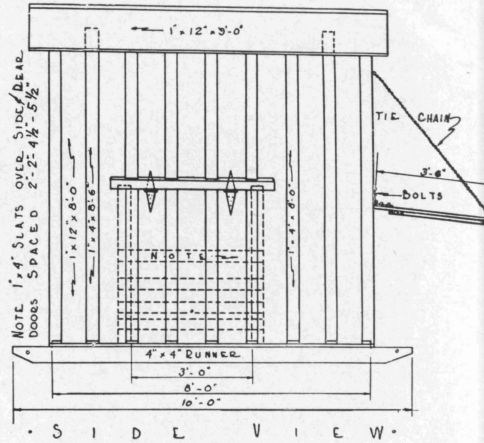
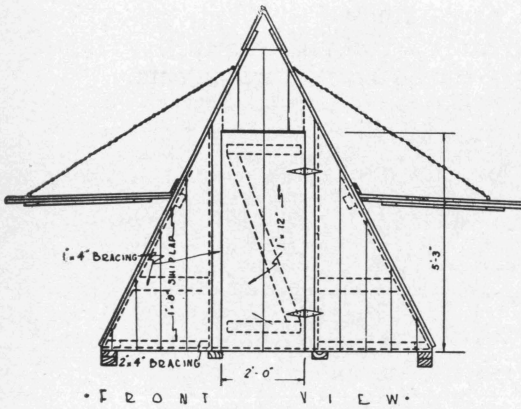
The sows should be placed in the pens a day or so before farrowing, and the heat turned on in the brooder several hours before the pigs arrive. The heat is ordinarily kept on continuously for 10 days, and if the weather is very cold for 2 weeks. The pigs can be placed under the brooder by hand till they learn to go under voluntarily. In some cases placing the pig under the brooder once or twice is sufficient, while in other cases it takes a day or two of training or occasional attention. Keeping the pigs under the brooder (by blocking the brooder entrance) for one or two hours soon after they are born, until they are warm and dry, is generally helpful.

Guard rails should not be removed when brooders are installed.

The brooder must always be securely fastened in place. If it is desired to move the brooder from one farrowing pen to another provision should be made to fasten securely in place in each pen.

The brooder consists of a wooden cover made in a triangular shape, with a 100 watt electric lamp shining through a hole in the cover: Too large a lamp may burn the pigs.

The brooder cover should be about 20" above the floor. A 2" x 4" should be placed above the brooder front to keep the sow off the brooder top.



“A” Type Portable Farrowing House—Blueprint No. 198

“A” Type House Is Inexpensive

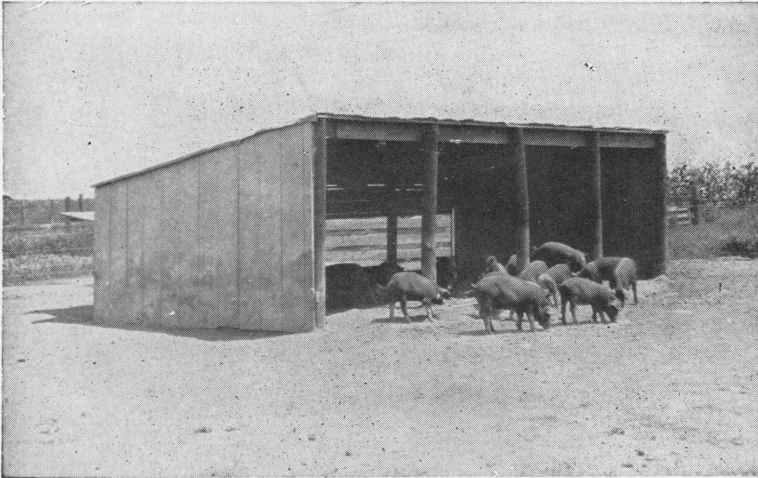
The “A” type house is the most inexpensive house to build. It is a warm house for winter use but is not as cool in summer as the shed roof house shown heretofore. Because the “A” type house tends to be hot in summer, it is especially important that it be well ventilated. The ventilating doors in the sides must be so constructed and fitted that they can be opened for ventilation in hot weather and can be closed so they will not leak for winter use.

Large Central Farrowing Houses

Blueprint plans for large central farrowing houses are available and can be obtained from county agricultural agents or by writing to the Swine Husbandman, Extension Service, College Station, Texas.

It Pays to Have Sheds for Fattening Hogs

It pays to provide fattening hogs with plenty of shade in warm weather and protection from cold and rain in bad weather. The shed should be high enough and open enough to permit a good circulation of air in warm weather. It should also be built so as to close tightly enough to give ample protection in winter. Shade trees will serve the purpose of a shed in summer, but they will not do for winter protection.



Shed for Stocker or Fattening Hogs

A well constructed, movable farrowing house will make a good fattening hog shed and should be used for this purpose when not needed for sows with small pigs. The fattening hog shed illustrated here will also give good results. Note that both ends of this shed are closed and that the back or north side is made of doors hinged at the top. These can be raised in summer. The roof is made of sheet iron. A shed thus constructed gives ample protection to stocker and feeder hogs and is very cool in summer. The shed, however, is not movable and therefore is not suitable as a farrowing house. This type of shed can be improved if built with a concrete floor.

For summer use only, a shade may be made with a brush or straw covering, as shown in the picture on the next page.



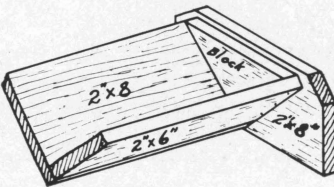
Brush Shade

Roofs

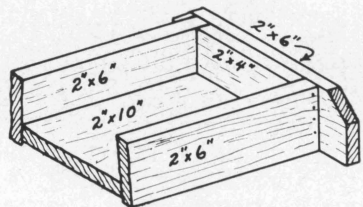
The roof of any type of hog house is important. Corrugated iron is very popular because it lasts well and if properly laid does not leak. For wet or cold weather the roof and walls for a windbreak are important features, but when a house is to be used in hot weather, it is important that plenty of ventilation be provided. In order that a house with a sheet iron roof may be kept cool in the summer, it is well to place the roof rather high—not less than five feet above the floor.

Troughs Are Important

A few suggestions on the construction of feed troughs may be helpful. Both the flat bottomed and the “V” shaped troughs have their place. The “V” trough is usually preferred as a milk or slop trough, because hogs can lick it cleaner. The flat bottomed trough has a much larger capacity and therefore is much preferred as a water trough.

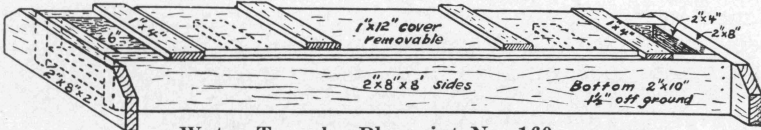


One end of “V” trough



One end of flat bottom trough

The sketch shows the construction of both flat bottomed and "V" shaped troughs that have proved satisfactory. Wider or narrower pieces of lumber may be used in the same manner for other sizes of troughs. Note the double ends. Ends built like this do not knock off easily. They also make the trough leak proof. It is best to use separate troughs for water and for feed.



Water Trough—Blueprint No. 160



One of the main features in providing a water supply for hogs is to get a sufficient quantity available so that they may get water whenever they want it. Numerous automatic water systems are used, but as a dependable and cheap arrangement the trough shown has proved very satisfactory. Enough trough capacity should be provided so that one filling per day will assure an abundant supply for the

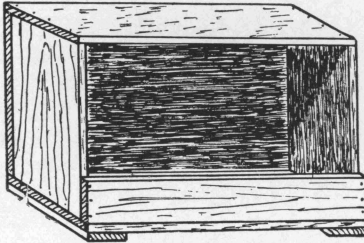
Water Trough Made Out of Oil Field Pipe
(Note partition between float-valve and drinking place)

hogs. This trough is arranged so that a hog cannot wallow in it and the cover is arranged for easy cleaning of the trough.

Many farmers who have a farm water system prefer to use water troughs with automatic float valves. Small inexpensive float valves, of a type designed for poultry troughs, can be purchased and work very well. The trough of course must be so built that hogs cannot get to the float valve and the trough must also be so arranged that it can be easily cleaned as mud in the trough will stop up the float valve. The trough need not be large. A drinking place 6 inches by 8 inches will provide 30 head of hogs with ample water.

Box Is An Aid To Mineral Feeding

The mineral box should be so designed that the contents will not be wasted. The box as shown here would provide considerable protection from rain.



Mineral Box

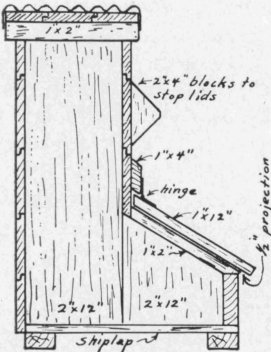
Of course it would be still better to locate the mineral box under a roof so as to give the mineral additional protection from rain and wind. It should be anchored to the building or fence to prevent hogs from upsetting it.

Self Feeders Are Popular

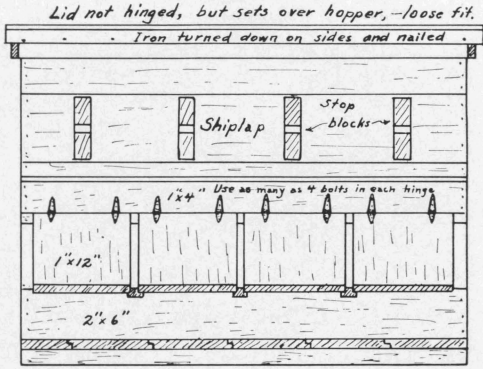
Self feeders have been found satisfactory and economical for feeding hogs in large numbers. When hogs have access to different kinds of feeds necessary to produce pork they usually balance their rations satisfactorily. The feeds should be placed in separate feeders or in separate compartments of the same feeder.

A good serviceable type of self feeder may be readily constructed by any farmer. Note that the drawing shows a flap to cover the trough that the pig eats from. This prevents rain from blowing into the feed and also keeps chickens from scratching out the feed. A pig will soon learn to lift this flap with his nose and eat; then when he withdraws his head the flap drops down and covers the feed. It is important that the flaps be selected from a board that will not split easily. More than that, they will have to be re-inforced with strips of thin lumber running crossways. **The hinges on the flaps must be fastened with small bolts.** Hinges fastened with nails or screws will not stay in place very long when they get the rough treatment that hogs will give them on these feeders.

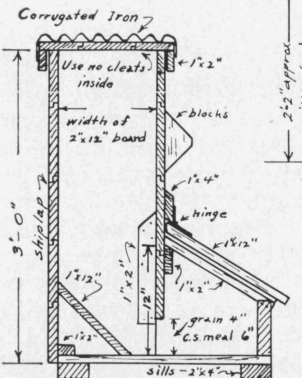
The self feeder may be made either shorter or longer than



END

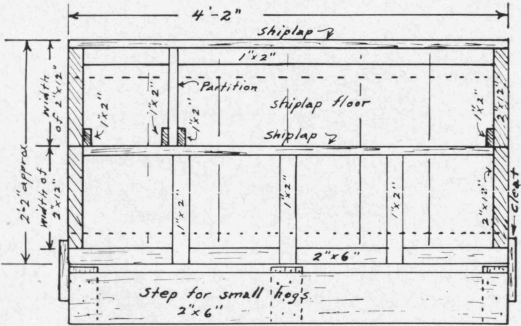


FRONT

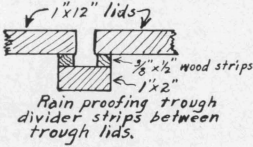


Nail floor to 1x2 and 2x6; then nail 2x4 sills to the floor, to permit easy removal of sills.

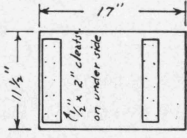
SECTION



FLOOR PLAN



Rain proofing trough divider strips between trough lids.



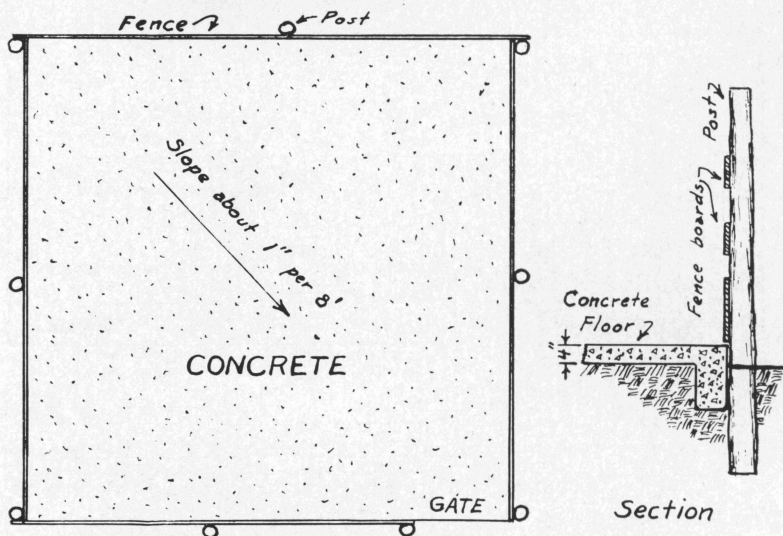
TROUGH LID

Self Feeder for Outdoor Use—Printed Plan No. 157

the one shown. In figuring the length of a feeder allow one linear foot of trough space for every two or three hogs. A feeder more than eight feet long would be too large for convenient handling. For a big herd of hogs use several feeders rather than one large one.

The feeder shown is designed for outdoor use. If the feeder is to be used only under a shed, the flaps and cover may be left off in order to reduce the cost of the feeder.

Feeding Floors Are Valuable



Concrete Feeding Floor

Where hogs are fed corn on the cob or milo in the head, a good feeding floor will soon pay for itself. There is considerable waste when grain is fed in the dust or mud. Wood feeding floors answer the purpose for a time but soon rot out, permit waste of feed and become unsanitary. Concrete floors are cheaper in the long run and are more sanitary. Feeding floors should be built high enough above the ground to prevent water washing over them and to prevent waste from accumulating on them. To determine the size of floor to build, allow eight square feet per hog.

A fence around the feeding floor is suggested as a means of preventing the hogs from carrying feed off the floor and wasting it.

Concrete Feeding Floor with Shed and Wallow

A number of hog growers have constructed a combined feeding floor with hog shelter and hog wallow in a compact unit. The entire floor is made of concrete. About half of the floor space is under the shed and half on the outside of the shed. Such feeding floors should have a good slope to provide drainage. About 16 square feet of floor space is required per hog. These feeding floors improve efficiency and save labor, not only on farms of heavy soil where mud becomes a serious problem but also on farms of sandy soil where a large number of hogs are fed. Concrete floors provide the best means of improving sanitation in hog lots.



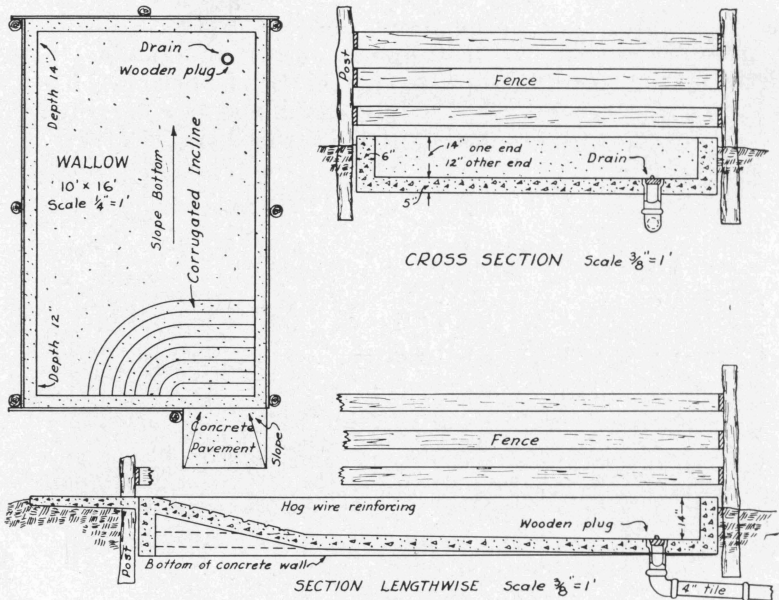
Concrete Feeding Floor with Shed and Wallow

Hogs Need a Wallow

Hog wallows are very necessary in Texas, especially if hogs are to be fattened during the summer. A wallow provides the best means possible for keeping the hogs cool. The wallow should be placed near the shade provided for the hogs, but the shade should never be built directly over the wallow.

If the shade is directly over the wallow all the hogs will be lying in the water all day. This is not good for the hogs and also would require a larger wallow than is necessary. If on the other hand the shade is several yards away from the wallow only a few hogs will be in the wallow at a time, and they remain in the water just long enough to get wet. Then they go back to the shade and as the breeze blows over the wet hogs they are kept perfectly cool.

Drinking water for the hogs should be provided in a trough placed in the wallow. A good wooden trough will do for this purpose. If piped water is available the faucet can be so located that a small stream from it will be continuously running into the trough and overflowing into the wallow. If these provisions are made, hogs will not drink the water in the wallow but will always go to the trough to drink. With these arrangements there is also no tendency for hogs to muddy up their drinking water or to root the ground around the water trough.



Concrete Hog Wallow—Blueprint No. 277

A fence around the hog wallow is suggested so that the hogs will not get the ground wet all around the wallow and then root in it. This is a means of economizing on concrete since it is then necessary to protect the wallow against the rooting of the hogs only at the small entrance provided for them.

A good wallow properly located makes a good feeding floor in seasons when the wallow is not needed.

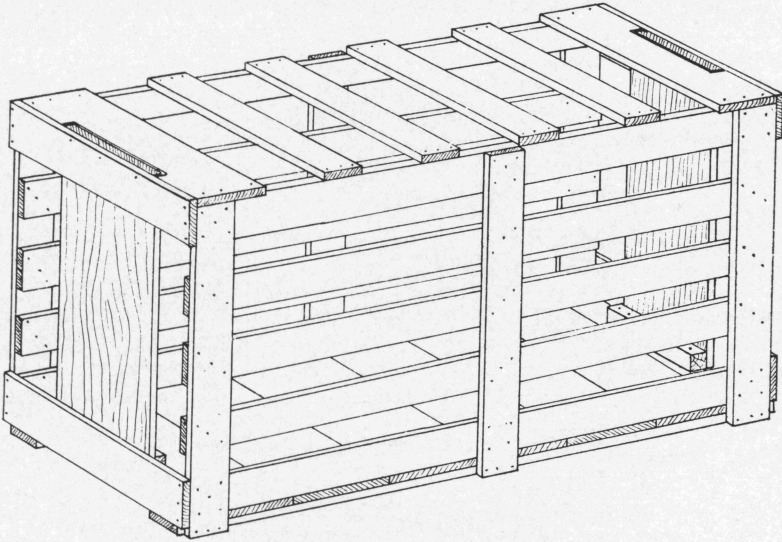
Dipping Vat

A dipping vat is useful to control mange on farms where large numbers of hogs are kept. Blueprints of hog dipping vats may be obtained from the County Agricultural Agents or by writing to the Swine Husbandman, Extension Service, College Station, Texas.

Shipping Crate Often Handy

Crates for shipping hogs should be constructed with two main objects in view: to make them secure so that no accident can happen in transit, and to get the maximum amount of space for the lumber used and the weight of the crate. A crate should be constructed of strong, light material and have a neat, attractive appearance. It should have a door at each end to permit the hog to walk in and also to walk out. It is

difficult to make a hog back out of the crate and sometimes results in injury. The inside of the crate should be smooth, hence all cleats and braces should be on the outside. A 1" x 6" instead of a 1" x 4" as the first side slat at the bottom, on each side, is preferred by some. The floor should be supported as shown, otherwise some of the floor planks may be pulled off.



Shipping Crate for Hogs

The table given herewith shows the size of crates for different size hogs.

Size of Hog Weight in Pounds	Length	Dimension of Crate	
		Height	Width
50	3'-3"	23"	12"
100	3'-6"	24"	14"
150	3'-8"	28"	15"
200	4'-2"	30"	16"
250	4'-6"	33"	17"
300	5'-0"	34"	18"
400	5'-4"	36"	20"
500	5'-8"	37"	21"
600	6'-0"	38"	22"

Loading Chutes

Every farm that keeps as many as two brood sows should have a loading chute. Lifting hogs into a wagon or truck is not only hard work, but often results in injury to the hogs. The hogs are often allowed to drop from the wagon or truck and are injured. This is especially true in regard to breeding animals. The loading chute is just about as valuable for unloading as for loading. The best permanently located loading chutes have a dirt floor. Hogs are not accustomed to wooden floors and therefore usually refuse to go up an incline made of wood. Portable loading chutes are sometimes desired. Plans for a portable hog loading chute are available and can be secured from the County Agricultural Agent or by writing to the Extension Service, College Station, Texas.

Breeding Crate

Very often swine breeders have a good breeding boar that they would like to keep in their herd for several years. Often these boars are of such size that they cannot be mated successfully to young sows. A breeding crate is very necessary in a case of this kind. A blueprint of a breeding crate is available and can be secured from the County Agricultural Agent, or by writing to the Swine Husbandman, Extension Service, at College Station.

Hog Ringers

Occasionally it becomes necessary to put rings in hogs' noses to prevent them from rooting. Hogs fed a completely balanced ration will not root their pastures full of holes. Hogs should be fed a balanced ration not only to keep them from rooting and catching chickens, but because balanced rations pay. Even though hogs are fed a balanced ration, they will do some rooting at times. This is especially noticeable in hot weather when they dig out large holes in moist dirt. To prevent this, ringing is a good practice. Hog rings and ringers may be obtained at nearly any hardware store.

Hogs are sometimes marked with ear tags put in with an ear punch. Others mark their hogs with "V" shaped notches in the edges of the ears. Punches for these purposes are on the market.

In the Pictures

On the Cover: M. G. Perkins, former county agricultural agent of Burleson County, and J. C. Godby, Burleson County 4-H Club boy, watch J. C.'s hogs in the concrete hog wallow.

On Page 9: Dr. J. E. Bauer of Refugio at his hog watering trough.

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