

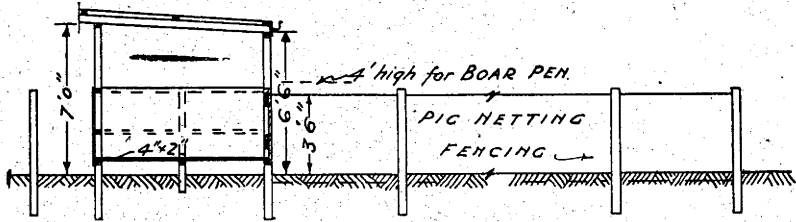
PIG NOTES.

By G. F. GEE, H.D.A.*

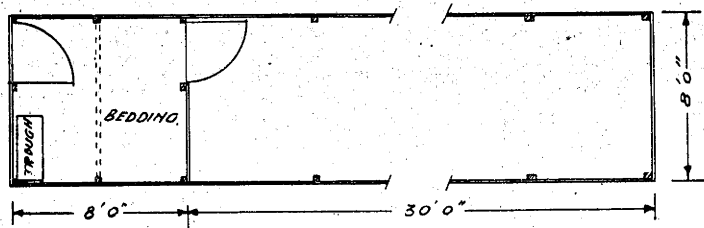
Bo Agricultural Station, New Ireland.

A Small Piggery.

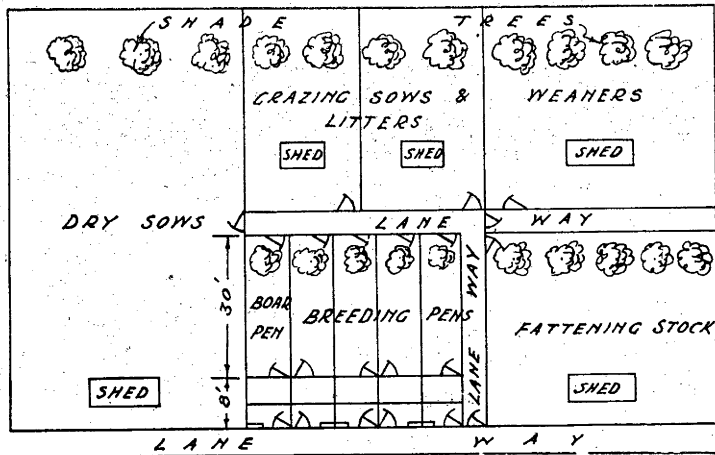
In the accompanying figure is given the layout for a small piggery suitable for New Guinea conditions. It will be seen that the plan allows for future expansion. The advantage of this layout is that the stock are moved from one



SECTION



BREEDING DEN (ENLARGED)



LAYOUT

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paddock to the next, in rotation, as they grow. The dry sows are near the boar pen, which will make it easier to detect sows on heat, and they are also near at hand to be placed with the boar, when ready for service.

If the roof of the sleeping pens is made to cover a passage-way 3 feet wide in front, it will facilitate the feeding of the stock in wet weather besides giving the pens more protection from the weather. A laneway around the breeding pens allows pigs to be drafted and shifted with little trouble. Shade trees are necessary in each paddock, and a wallow would be an advantage, but this must be properly constructed. A mud hole in the paddock is worse than useless and is a source of infection for kidney worms and other parasites. The floor of the shelter sheds should be raised from ground level and should be of timber. In the breeding pens, a wooden sleeping platform of preferably 4 inches by 2 inches hardwood is necessary, as chills, paralysis and other illnesses can usually be traced to the pigs sleeping on damp ground or concrete floors. Once a young pig has received a setback from a chill, it is almost useless to attempt to fatten him, and he might just as well be killed off.

Breeds.

For all ordinary purposes, the best breed for this climate is the Berkshire, and this breed will rapidly improve local stock. If, however, an attempt is to be made to produce bacon pigs, then another breed will have to be considered, as the Berkshire is much too fat for good bacon. The Tamworth, or the Tamworth Berkshire cross, would be best if bacon is to be the main consideration, but care should be taken in the type of Tamworth boar chosen for this purpose.

Pigs from five months to a year old could be successfully introduced to this Territory with very little trouble. A boar cannot be properly selected until he is approaching six months old, and, of course, if a sow is being introduced, to farrow after her arrival, she will be almost a year old, for she would be ten months old before being mated.

Bacon Curing.

In this Territory, bacon could not be successfully cured unless refrigeration were employed. The ideal temperature is 40° - 45° F., and should never exceed 60° F. A planter may cure a little bacon and be perfectly satisfied with the result, but it would probably not keep for any time. Where refrigeration is possible, there is no reason why bacon curing should not be a successful industry in this Territory. Temperature is a most important factor in bacon curing.

A good recipe for pickling is as follows—

- 50 gallons clean water
- 160 lb. fine salt
- 16 lb. brown sugar
- 16 lb. saltpetre
- 1½ lb. all spice (ground)

This is sufficient for about 700 lb. of meat. The procedure is as follows:—Boil water, then add salt, sugar and saltpetre. The allspice, which has been tied in a calico bag, is allowed to float in the mixture. This is boiled for one hour, and

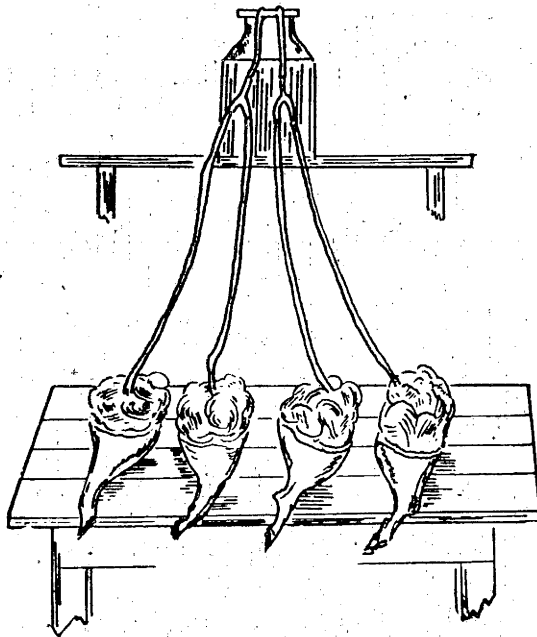
any frothy matter rising to the surface is skimmed off. The solution is then allowed to cool to room temperature before using. Each piece of meat is now pumped with the pickling solution which has been made up to 100 per cent. solution by the addition of more salt. This density is taken with a salinometer. Too much pressure should not be used during pumping; for it tears the meat. The pickle is pumped along the bone into the synovial sacs and pockets. The meat is now placed in the pickling solution and, if necessary, clean pieces of hardwood are used to keep it well covered. This method of pickling requires a needle and pump, but if these are not available a good system, as outlined in the *Handbook of Philippine Agriculture*, is as follows:—

"One or two days before killing, prepare the following ingredients for every 100 kilograms of meat to be cured.

Common salt	..	..	..	..	24.00 kgm.
Sugar	..	..	..	..	3.00
Saltpetre (potassium nitrate)	..	..	..	..	0.75
Total	..	..	..	..	27.75 kgm.

"Dissolve the above mixture in clean water to make 100 liters of solution (brine). This may be sterilized by boiling. After straining, let it stand to cool and to allow the precipitate to settle down. The precipitate is discarded by decanting. If only four legs weighing 20 kilograms are to be cured, 20 per cent. of the above formula is sufficient.

"Secure a glass tubing, with one end drawn to a fine point. Insert the pointed end into the artery of each leg.



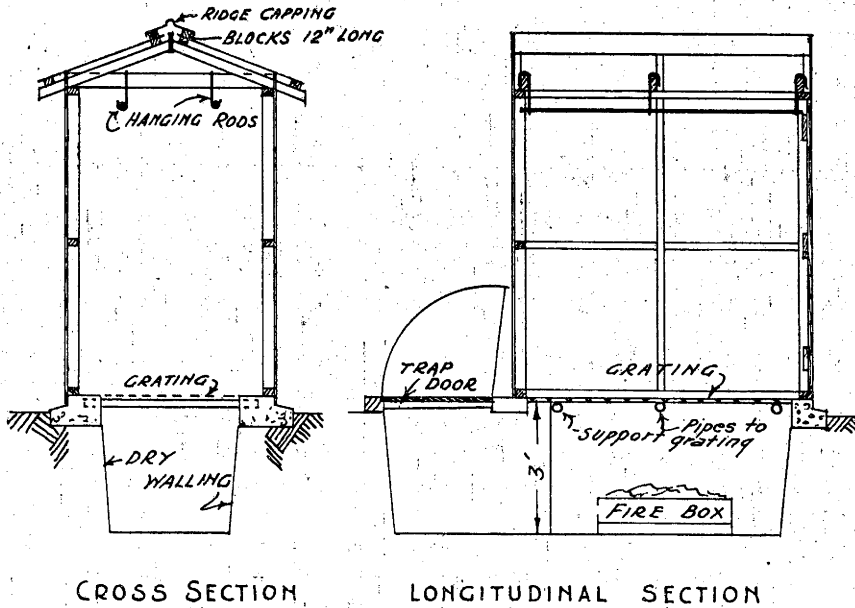
"For each leg weighing 5 kilograms, use a jar containing 5 liters of brine. The brine is siphoned into the leg by means of a rubber tubing, and allowed to flow into the leg for 18 to 24 hours. During the first two or three hours, the flow should be at high pressure to dilate the arteries and to detect any leakage, which is stopped by clamping or ligating. High pressure is obtained by placing the jar high (see illustration).

"The next day the rubber tubing is disconnected. A quantity of the curing ingredients, undissolved, is gently rubbed against the surface of the leg. The meat should be covered with a box to keep out the flies and the light. More of the curing mixture is again applied on the third day. The leg is turned over every other day.

"On the sixth day, any excess salt is washed off carefully. The leg in the smokehouse is hung to drip.

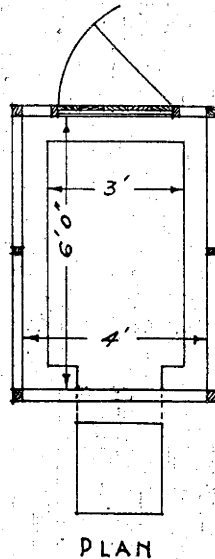
"Drying and smoking is started on the seventh day. A fire is built on the floor of the smokehouse, and smoking is continued for a week or until the ham has assumed the colour and firmness desired."

SKETCH PLAN OF SMOKEHOUSE.



CROSS SECTION

LONGITUDINAL SECTION



PLAN

Where only one or two pigs are being smoked at a time, an old 600 or 800-gallon galvanized tank makes a good smokehouse. The top of the tank is cut out, and battens, on which the meat is placed, are put across the top. A hardwood sawdust fire, about three inches deep, is made in the bottom of the tank, and the whole covered with bags or a tarpaulin. Direct heat should be prevented from reaching any meat that may be hanging over the fire, by placing a piece of galvanized iron over the fire on loose columns of bricks. If direct heat reaches the bacon, the fat will melt, and with it go part of the flavour of the meat. The smoke-room temperature should never be more than 90° F.

If something more elaborate than the tank is desired for a smoke-room, then a room about 4 feet by 6 feet, built over a 3-ft. pit and extending outside the building, with a trap-door fitted, is recommended. A ventilator is fitted to the trap-door to control combustion. This type of smoke-room is shown in the accompanying plan.

NOTES ON THE PREPARATION OF "GAPEK" FROM CASSAVA (TAPIOCA) ROOTS.

Great success has attended the use of "Gaplek" as a partial substitute for rice in the Netherland East Indies, and the following information on the method adopted in Java for its preparation from cassava (tapioca) roots has been supplied by the Director of Commerce at Buitenzorg.

The roots of the tapioca are first pared and then split lengthwise into four parts, which are again cut into three or four pieces, 3, 4 or 5 inches long and 1½ to 2 inches thick, according to the size of the roots. These pieces are dried in a natural way, i.e., by exposing them for five or six days or longer, if necessary, to the sun and, as they contain a large percentage of water, the loss in weight is considerable. Three tons of fresh roots are necessary to obtain one ton of the dried product.

When required for food the Gaplek is converted into flour. Two and a half katies (1 katie = 1½ lb.) a day are sufficient for a family of five persons. Usually one gantang (= 1 gallon) of Gaplek is pounded in an ordinary rice mortar. The pulverised mass is then winnowed to separate the flour from the coarse root fibres. This flour can be used in the same way as pounded rice or maize.

For daily use as a foodstuff the flour is spread out in a tray, then kneaded with water and afterwards steamed in the same way as rice. The cooked mass is somewhat glandular and can be eaten in the same way as boiled rice, with or without vegetables and condiments.

If a certain amount of rice is available, it is advisable, instead of finishing all the rice first and afterwards using Gaplek, to mix rice and Gaplek flour in equal quantities and steam until thoroughly cooked.

