

herds do, with their teeth. Docking is best done by having an attendant hold the lamb standing on its feet, the operator cutting upward through the tail from the under side, at the second or third joint from the rump. This practice avoids danger from shock of the spine and struggling. Should undue bleeding ensue, which is seldom the case at this age, it may readily be checked by tying a soft string tightly around the stump. This should be cut away in a few hours.

### A Study of Breeds of Swine.

#### POLAND-CHINAS.

The Poland-China breed originated chiefly in Warren and Butler Counties, in the Miami Valley, in the State of Ohio. For many years various names were applied to the breed, as, Magie, Miami Valley, Poland, Poland and China, etc., but at the National Swine-breeders' Convention held at Indianapolis in 1872 it was decided that the breed should be known as the Poland-China, and this designation is now generally accepted.

The foundation animals in the formation of the breed were the common stocks of the country, essentially of very mixed breeding. These were more or less crossed with the Russia, the Byfield and the Big Chinas, all of which existed in Warren County prior to 1820. The Berkshire cross was introduced in 1835, and subsequently gave the black color, improved symmetry and increased activity, and imparted additional strength in the limbs. The Irish Grazier cross, introduced in 1839, gave improved grazing qualities and increased hardihood. No out-crosses, it is claimed, have been made since 1845, though the color markings of the breed, being so nearly like those of the Berkshire, would seem to suggest a dash of that blood, as our early recollection of the breed is that many of them carried nearly if not quite as much white as black.

Formerly the Poland-Chinas were larger and less refined than at the present time, but though reduced in size and improved in form, they are still among the largest of the medium breeds. They possess in a high degree early-maturing qualities, but the inclination of the breed, as found in the United States, where little or no attention has been given to producing what is known as the bacon type, and where corn is the principal if not the only food used, the inclination is to mature so quickly as to interfere with sufficiently large growth, and also with prolificacy. But as bred and fed in Canada in recent years, the specimens exhibited at the fairs have, in most cases, shown improved length of body and smoothness of shoulders, indicating that, with judicious management in breeding and feeding, the breed is quite capable of being moulded into the bacon type. As grazers they are free feeders and easy keepers, but they want good pastures. They kill well, and the quality of their meat is fine in the grain and tender, but where fed corn as the principal diet the proportion of the fat is large, and the bacon only medium. They have proved well adapted to corn-growing countries, hence their great popularity in the Western States, where, following cattle fed whole corn, they grow and fatten rapidly on the undigested grain passing through the cattle, and are thus prepared for market at comparatively little expense, and on food that would otherwise be largely wasted.

Poland-Chinas are widely distributed in the United States, being found in probably every State in the Union. They have also been introduced into several of the Provinces of Canada, though not in large numbers, and have never become generally popular in this country. For crossing on common stocks deficient in compactness, early maturity and good feeding qualities, they answer well, but they are not suited for crossing on the refined breeds. Owing to the too free and prolonged use of a corn diet in the United States, which has had the effect, in too many instances, of impairing their fecundity, their breeding qualities, as to producing large litters, are only fair. The same influences have had the effect of unduly weakening the bone and reducing the stamina. But where they have been selected for length and strength, fed a mixed diet, and given ample exercise, these deficiencies have been largely overcome.

Some of the principal points in the standard of excellence for the breed are as follows. Head—Short and wide; cheeks full, and jaws broad; forehead high and wide; face smooth, and wide between the eyes, and slightly dished; ears small, thin, soft, silky, tips pointing forward and slightly outward, and the forward half drooping gracefully; neck wide, deep, short, and nicely arched; shoulder broad, deep and full, carrying size well down to belly line; back broad, straight, or slightly arched, carrying same width from shoulder to ham; sides full, smooth, firm and deep, carrying size down to belly, and evenly from ham to shoulder. Belly and flank wide, straight and full, and drooping as low at flank as bottom of chest back of fore leg; hams broad, full, long and

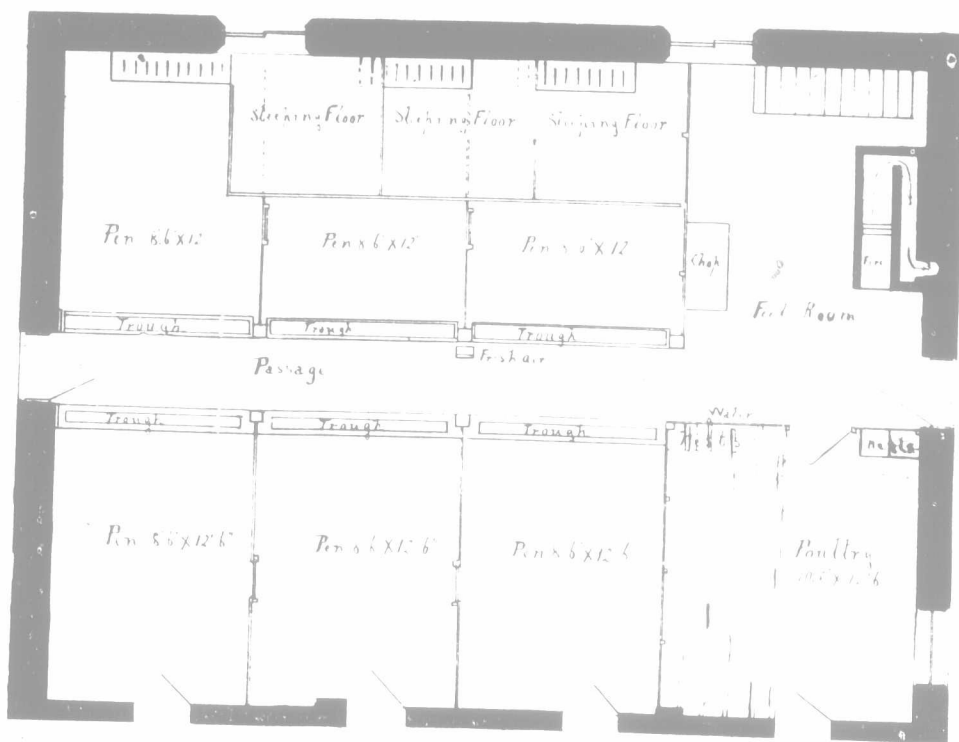
wide; legs medium length, straight, set well apart and squarely under body, well muscled, and wide above knee and hock; feet firm, short, tough and free from defects; tail well set on, smooth, tapering, and carried in a curl; coat fine, straight, smooth, lying close to and evenly distributed over the body; color black, with white on face or lower jaw, white on feet and tip of tail, and a few small, clear white spots on body not objectionable; size large for age and condition—boars two years old or over, in good flesh, should not weigh less than 500 pounds; sows same age and condition, 450 pounds; boars and sows six months, not less than 150 pounds. In general appearance the Poland-China is compact, symmetrical, regular in outline, smooth, and almost massive in build.



A Poland-China Boar.

### D. Lawrence's Pigpen.

In response to requests for plans of hogpens, we republish one designed and used by Mr. D. Lawrence, Oxford Co. The dimensions are 30x10 feet, with 8-foot ceiling. Each pen would accommodate easily six, possibly seven, full-weight hogs. Most people would prefer to have the hen-house in a separate building, and utilize the room it takes in this building for another pen for pigs. Elevated sleeping floors are here shown, and are still used by many, though the general preference is for a sleeping floor raised a few inches only. Over each trough is a swinging front, so that while trough is being cleaned and fresh feed given, pigs are kept back. This style of house for pig feeding, the main features of which are center



PLAN of PIC PEN

aisle, with pens on each side, is now quite common, and can be adapted to any required capacity. Where only a few pigs are kept, two or three pens on one side of aisle would be sufficient. A good idea, put in practice by Mr. Lawrence, is to have an upper story for storing straw for bedding, etc. In loft Mr. Lawrence also has a water tank supplied from the roof, the water being conducted by iron pipes to pigpen below, and by hose attached, water can be run into each feeding trough or into cooking vat, or can be used to clean off the floor.

### The Value of "Imp."

To earnest students and breeders of live stock the word "Imported" has always had a definite rational meaning, and the value of "Imp." attached to a pedigree has ever been measured in their minds in the light of careful knowledge. The use of imported animals in the herds, flocks and studs of such men has been an evident, if silent, recognition on their part of the pre-eminent position among breeders of the British stockman. Until on this continent some certain breed or breeds may have attained a standard of excellence equal to, or surpassing, that of the corresponding breed or breeds in the mother country, until then, selected animals of such breeds may be successfully and profitably imported, to be used in the improvement of our herds. And even then, when Canadian and American breeders have reached such a position, an interchange of blood may serve a useful purpose. But in the common parlance of the country there has been such a magic charm surrounding the word "Imported" that a consideration of the utility of an imported animal may call to mind some facts that may have been forgotten. If our thought is fettered to such a degree by our regard for imported stock that in private and public sale a premium is placed upon such stock, sometimes at the expense of equal excellence, both of individuality and of pedigree, in the animals produced by breeders in our own country, then it would appear that, to a certain extent, we are allowing our judgment to become perverted by this regard, and we are waiting too long to give due acknowledgment to the intelligent and patient effort of the stockmen of our own land. Moreover, it may be we are tacitly admitting that we cannot produce in Canada either the men or cattle that are to be found in England and Scotland, or at least we are not giving an independent recognition to the progress of stock-breeding on this side of the "water," nor are we holding ourselves prepared to take the fullest advantage of it. Such an attitude, if at all manifested on our part, cannot but make for retrogression rather than for advancement, and serves but to stamp us as imitators, while we inherit the right to be fashioners of our own destiny. The superiority of British-bred stock is due largely to the following suggestive facts. It has been bred pure for a goodly number of generations, and the sires possess, therefore, such prepotency as enables them uniformly and impressively to reproduce in their offspring the distinct and peculiar characteristics of their own breed. It has been bred for a sufficient period of time with a definite, specific object in view to allow the specialized, dominant characteristics of the different breeds, i.e., the characteristics by which the utility of each of the breeds is judged, to become firmly fixed and established. It has been bred, each breed in its own locality, so that the breeds, in process of their improvement, have become naturally adapted to the climate, food and environment of particular sections of the country, and possess, therefore, the constitution, ruggedness and vigor that is so essential to animals kept under the somewhat artificial conditions of domestication. Herein, then, lies the value of imported stock for use in the improvement of our herds. From purity of blood we get prepotency, or the ability to transmit the desirable characteristics of the different breeds. From long continued specialized development we find the ability possessed in typical representatives of these breeds to improve our stock in particular, specialized characteristics whether it be mutton production in sheep, bacon production in swine, the capacity for speed or power in the horse, or beef or milk production in cattle. From the natural adaptation to and very often in imported animals a robustness frame that, when their blood is introduced into our own herds, while not making our animals any more hardy or healthful, it tends to increase the size, and at the same time to retain and frequently improve the quality of our stock. These, it would appear, are the advantages to be derived