

on exactly the same principle. I have never known this method to fail when applied as above suggested. Moreover, the cure is permanent.

Care of the New Born Foal.

As the season in which a large percentage of breeding mares will reproduce is approaching, it may not be considered unwise to discuss some of the precautions that should be observed, and the manner in which abnormalities should be treated, with the hopes that the discussion may be of some value to breeders that are beginners. In normal cases neither dam nor offspring requires any attention more than attention to comfort, and proper food and water, but abnormalities are of sufficiently frequent occurrence to make observance of precautions wise. Mares about to reproduce should be carefully watched. The attendant should be a careful man, who at least understands the normal procedure of the act, in order that he may be able to recognize an abnormality, and of course if he have a technical knowledge and ability to handle abnormalities all the better, but even though he should lack the latter knowledge and ability he will at least be in a position to procure skilled attention if necessary. He should be provided with certain accessories which he will be liable to require, and in some cases the time necessary to procure them when their use has not been anticipated, may mean the difference between a living and a dead foal. He should have a knife; a strong cord immersed in a bottle containing a 5 per cent. solution of carbolic acid or other disinfectant, with the string projecting beyond the cork in order that it may be secured promptly; another bottle containing a few ounces of strong disinfectant, as a solution of corrosive sublimate about 15 grams to 8 ounces water; a 10 per cent. solution of carbolic acid or other strong disinfectant. The writer prefers the first mentioned. He should have a 4 oz. syringe and if he has a general knowledge of obstetrics he should have some parturition instruments; a small strong rope, so spliced as to form a neat loop in one end; a few hooks etc. As stated, the mare should be closely watched. When labor pains commence the attendant should if possible keep out of sight of the mare, but at the same time so situated that he can see her. In most cases the presence of an attendant tends to excite the mare, but there are cases in which his presence appears to have a salutary effect and of course such cases should be treated accordingly. When the progress is normal of course it is unwise to interfere, but if labor pains be well marked and delivery is not progressing, or has progressed to a certain stage and then ceases, the attendant should endeavor to ascertain the cause, and if he have sufficient knowledge and skill to remove the obstruction to delivery he should do so, if not he must procure more skilled attention. While it is not wise to interfere too quickly, in other words "give nature reasonable time to operate," when extraneous interference is required it should be given promptly, as delay or unskilled interference may cost the life of the foetus and not unfrequently of the dam also, on the other hand, both may be very easy and occupy only a very few minutes in which case it is not uncommon for the foetus and membranes to be expelled together and in some cases the latter are not ruptured and unless they be cut or torn and the foetus exposed to the air immediately it will perish from suffocation. Instinct is supposed to teach the dam to rupture the membranes with her teeth in such cases, but the fact is, she is seldom prompt enough and the young thing perishes. The attendant should cut the membranes with his knife and remove them from the foetus. In such cases, and frequently in cases when the membranes are ruptured, but expelled with the foetus, they are still attached but by the navel or umbilical cord. Conditions are more favorable when the cord is broken during parturition, but where not it must be severed. The attendant now takes the cord that is in the solution in the bottle and ties it tightly around the navel cord about one inch from the abdomen and should sever it with a scraping motion of the knife about one inch below this. Whether the cord be broken during parturition or severed afterwards it should be dressed as soon as possible after birth and several times daily afterwards until it dries and heals. This precaution is wise as a prevention of joint or navel ill. The attendant should now remove the afterbirth from the stall and also remove all wet soiled bedding. Scatter slaked lime on the floor and supply fresh, clean bedding. If the foal be strong it will soon be able to get up and walk and most cases will nurse without interference. If the mare be cross with the foal it may be necessary to apply a twitch to induce her to allow the foal to nurse and it may be necessary to do this for several times. If she be normal with the foal, but vicious or cross with the attendant and the foal be smart, it is wise,

in most cases, to leave them alone. If the foal be weak and unable to help himself, when at most two hours old, the attendant should assist him to his feet and see that he gets nourishment, and this should be attended to hourly day and night, until he is able to rise and help himself. Care should be taken to observe that the excretions are normal. If the ineffectual attempts be made to void urine, or it be voided through the navel, a catheter should be passed in order to ascertain that the normal passage be not occluded and if it is the occlusion will be broken down by the catheter. If the contents of the bowels, which exist in dark brown or black balls of various sizes and densities (called the meconium) be not voided spontaneously within a few hours of birth, and especially if ineffectual attempts be made to void it, the attendant should, first trim or cut his finger nails, oil his forefinger and insert it carefully into the rectum and remove all of these lumps that he can reach and then, with the syringe inject into the rectum a few syringe fulls of equal parts of raw linseed oil and warm water or warm water with a little good toilet soap in it. This should be repeated every few hours until the excretions become yellowish in color. This treatment for what is called "Retention of the meconium" cannot be too firmly emphasized. The too common practice of administering laxative or purgative medicines in these cases, causes the death of many foals that could otherwise have been saved. The trouble is in the rectum. The meconium exists in lumps so large that the foal has not sufficient expulsion power to force them through the anus. Medicines given by the mouth have little or no action upon the contents of the rectum, hence by causing a greater or less fluidity of the contents of the anterior intestine but not removing the lumps from the rectum they simply complicate matters. In rare cases it is necessary to give laxatives, but in most cases the careful use of the finger and syringe as stated, will suffice and not in any way deplete the energy or strength of the patient.

WHIP.

LIVE STOCK.

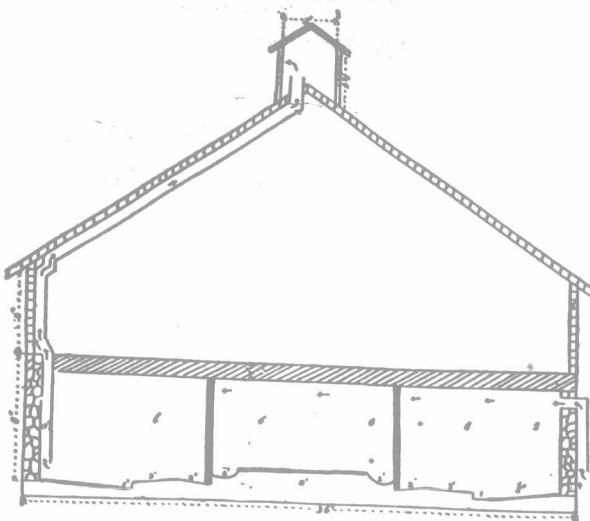
Ventilating the Piggery.

Editor "The Farmer's Advocate":

Referring to the two pig pen plans and descriptions of same in a recent number of the Advocate, I have to say that I think you had better keep on and tell us how to build a pen that will be dry in cold winter weather. Last fall I built a pen similar to your No. 1 pen. The ceiling was of inch lumber laid loosely on the joists. The building was double boarded on the outside of the frame with tar paper between. As soon as cold weather came, the whole inside of the pen was coated with frost. I have my own opinion as to what will have to be done to make my pen drier, but I would like to have you continue your article re pig pens and tell us how to build them properly.

Frontenac Co., Ont.

A. C. A.



A Good System.

The King System of ventilation as shown for a dairy barn or hog-house, from Productive Swine Husbandry, by Day.

These columns have always been devoted to the description of plans that are within the reach of the average farmer. Particularly have we tried to present the happy medium between the elaborate, palatial hog house, and the dark and filthy hovel so common on Canadian farms. Not only with us in Canada is this a fault, but in the hog raising districts of the United States, growers think that money invested in comfortable

quarters is thrown away, and the result is that millions of dollars' worth of swine fall a victim to diseases of a contagious nature. The soil is the natural habit of the hog and raisers should try and duplicate the light, abundance of good air and sanitary conditions that surrounded them in that state. The foregoing letter is a reminder of the general mistake made in the construction of farm buildings at the present time. The absence of ventilation and lack of light are too common to be pardonable but epidemics and diseases will, in time, bring our farmers to a realization of the fact and be instrumental in the construction of better buildings.

Regarding ventilation in the piggery nothing has ever been achieved that is universally satisfactory. If we might venture a suggestion in connection with our correspondent's letter, we would say that the lack of ventilation in the building is responsible for the frost accumulating on the walls. There is another improvement which might have been made in the construction of the building and that is to have used the studding to provide an air space between two layers of the wall. The best wall to exclude cold and insure dryness that we have seen or heard tell of is that recommended by Prof. J. H. Grisdale, of the Central Experimental Farm. It is constructed in the following manner—the inner side is of smooth or dressed lumber followed by one thickness of linofelt paper then will come the studding, an air space followed by two thicknesses of building paper overlaid with matched lumber and battings. This, of course, is a more expensive wall than one would wish to provide for a piggery, but the principles therein set forth are of use in studying the nature of a wall to insure dryness and the exclusion of cold.

Ventilation is a great help in preserving dryness, but it is difficult to secure it without sacrificing warmth to a certain extent, yet the pigs will be more comfortable where the ventilation is good rather than in stagnant warm air. In modern piggeries one idea is being put into practice and that is doing away with the ceiling and providing more air space in the building. This however, necessitates lining the inner side of the rafters with dressed lumber and increases the expense. The principle which must be worked out is to admit fresh air into the house and provide some exit for the stagnant and impure air. There are systems in vogue which provide this and usually it is a combination of the many which gives the best satisfaction. The Rutherford System allows for the inlet of air with an exit leading up from the ceiling of the building to an outlet at the top. The King System provides inlets with the outlet starting from near the ground going up the wall, up the side of the roof and opening at the ridge-board or peak. In their entirety they are somewhat expensive, but a cheap and inexpensive system might be provided as a modification of the two.

In the case of the King system, the inlets should start on the outside, enter near the ceiling and diffuse the air over the top of the pen. The outlet flues which might be four inches by eight inches should start near the bottom in order to collect and carry off the impure and stagnant air. The cupola or outlet at the top should be so arranged that snow or a downward current of air could not trouble in the outlet flues.

In the case of the Rutherford system, this flue instead of starting from the bottom of the pen opens at the ceiling and a current is generated upwards through this flue. The dimensions of this outlet flue in the Rutherford system should be somewhat larger than were described for the King system. We are inclined to believe that a ceiling made of small poles placed a few inches apart and covered with straw would control the moisture to a large extent. In this case, the straw should be removed yearly for it will become a harbor for insects and disease germs. In addition to this, it would be a simple operation to construct the flue upwards through the ceiling as described for the Rutherford system and as for inlets some cheap system or aperture might be constructed in the wall or a part of the sash of the window to act as a means of admitting pure air.

Where a feed cooker is installed in the building, the flue and the long pipes will provide a good circulation. If it is a small building, the stove should be at the opposite end of the building from the flue and the heat of the pipe going through the length of the building will generate an upward movement of air. Where the building is quite long, the stove might be situated in the centre of the building, in order to do away with the long length of pipe. A small outlet could be opened at the bottom of the flue and the draught up the chimney would insure sufficient suction to carry off the air and furnish a circulation throughout the building.