

sometimes be caused by over-feeding. Piggeries built with stone or concrete walls and floors are generally more dangerous than those built of wood. When such walls are hollow and the floors insulated with a tar layer, they are much safer.

The hog becomes very lame and stiff and moves about with difficulty. Sometimes the joints become swollen and very painful, and the animal becomes practically helpless. In such cases it is seldom that the hog makes a recovery.

The feeder must be on his guard against this disease. Dry, well-ventilated pens and careful feeding will generally enable him to avoid disaster. Animals which become affected should be kept in dry, warm quarters. Dr. Craig ("Diseases of Swine") says: "Salicylate of soda is the most useful drug to give in this disease. The dose is twenty or thirty grains in the feed, or as a drench, three times a day. Larger doses, and at more frequent intervals, may be given in acute cases for a short time. Quinine and bitter tonics can also be given. Blistering ointments and liniments should be applied to the inflamed articulations."

#### RICKETS.

In this disease, which is commonly found among young pigs, there is enlargement, bending, and distortion of the bones of the joints and limbs, and fractures of leg bones are not uncommon. The bones do not contain their normal proportion of mineral matter, and hence lack strength. It is claimed that the disease is most common among closely in-bred hogs. The excessive feeding of corn throughout generations of swine is believed to be an exciting cause, or any conditions which interfere with proper nutrition, such as disease or unsanitary surroundings, may predispose towards the disease in question.

Dr. Alexander of Wisconsin says: "Pigs affected with rickets can seldom be profitably treated. Prevention is to be sought by avoiding the causes mentioned, maintaining sanitary conditions about the hogs, providing adequate supplies of various feeds, rich in all the requisites of a perfectly nourished animal, and obviating degeneracy by careful selection of robust sows and timely infusion of new blood."

Plenty of mineral matter should be provided at all times during the life of the pig. Methods and forms of supplying mineral matter have already been given in this bulletin.

#### PARALYSIS.

In Virginia Bulletin 189, Dr. Mayo writes: "The disease first appears as a slight loss of control of the hind legs, as shown by a weaving of the body, knocking of the fetlocks, and finally a paralysis more or less complete. The animal is unable to raise itself on its hind legs, and often drags the hind quarters as it moves about. The disease occurs in swine of all ages. This disease is popularly supposed to be caused by 'kidney worm,' but there is no evidence to support this belief. The disease seems to be located in the spinal cord at the lumbar region, but the actual cause is unknown at present."

"Some cases recover without treatment, but a majority of the cases prove fatal. Generally the treatment is to give a purgative of from one-half to two ounces of castor oil, depending upon the size of the animal, followed by nourishing, easily digested feed. Rubbing the back vigorously with a good veterinary liniment once daily is also beneficial."

#### MANGE.

Mange is caused by very small animal parasites called mange mites, which burrow in the outer layer of the skin.