

at London last winter, produced a good deal of testimony on this point.

At that meeting, Mr. W. James, for twenty years past engaged in the pork business in London, bore testimony on many points of prime importance to the farmers. He stated that hogs which now bring the highest price do not weigh more than 150 pounds, and should not be over fat, but that those weighing more than 200 pounds could not be too fat. It was his opinion that the Berkshires gave the best pork for every practical purpose, and that the better their breeding, the better did they cut—being longer, wider and thicker in the ham than any other breed. Better on the flank, and their meat, thick and firm, gives the best quality of sugar-cured rolls. The shoulder, too, he thought superior cutting, more above and on the back than that of any other hog.

They were also shorter on the neck and were better flavored throughout than other breeds; and cut all in all to better profit, although they (the buyers) paid as a rule about \$1 more per hundred for them than for ordinary pork. In some hogs the belly meat has to be separated and thrown among the renderings; but they never had to do this in the case of a Berkshire. He believed that in nine cases out of ten he could pick out the carcass of a Berkshire, blindfolded, amongst a score of others, owing to its superior quality.

Nearly all the breeders present thought the Berkshire pig made more growth and gave better results from the feed consumed than were obtained from the other breeds; that they received for them a higher price and were more profitable all around. In the extra price received consisted very largely the profit.

In feeding heavy hogs for the butcher, it was thought that peas made the most complete work in fattening and that corn came next in order. For young porkers ground oats with a mixture of shorts and wheat middlings were considered best. These furnished enough of muscle and enough of fat to promote favorably the growth of young hogs. Breeding stock require a variety of foods; not that which induces the laying on of much fat, which would interfere more or less with successful breeding.

In breeding sows the writer has found a larger percentage of losses arise from over-feeding than from any other cause; but you cannot feed a sow too much when she is giving suck to her young pigs. In my own experience I feed liberally during the winter season with plenty of meal, some bran and a careful supply of oatmeal, taking care that the sows do not get over-fat. The only change made in the diet up till the time of farrowing consists in adding more bran and lessening the quantity of roots fed for a few days preceding the time of farrowing. After that period she requires little else than plenty of warm drinks with a couple of handfuls of bran in each. After two days the food is gradually increased both as to quality and quantity. My practice is to give the sow unlimited bedding, contrary to the general opinion, and so far have had no reason to regret having done so.

A few years ago we had a sow due to farrow, placed in a pen with scant bedding and a shelving around the wall to prevent crushing them. The weather was not genial and they all perished. Another sow stole away into a hole dug into a straw stack and was there delivered of nine pigs, and reared them all, although she had to come backwards out of her self-made prison owing to its smallness. Two years ago we lost nine out of ten pigs from a sow that had been fed too much peas and not enough of the coarser foods. On the 20th December last, one of our young sows had twelve pigs and raised them all. She farrowed in a frost proof stall amid two feet of straw. The thermometer without stood at 20°.

No one likes to see well fed and sleek looking swine better than the writer, nor does any one feel more nervous on hearing their loud complaints over a short allowance, the moment the piggery door is opened. Yet it is better to keep a shade on the light side in feeding, and suffer their grumblings, than to kill them with kindness. Observation tells us that a pig does not always know how much is really good for him.

### A Hackney Sire.

Mr. George Bourdass, in the London *Live-Stock Journal*, sums up the qualities of a good Hackney sire as below:

1. A good constitution, sound in wind, limb and eye-sight.

2. Well-developed muscle in every limb, and of even calibre and texture, firm attachments, so that no one can say which is the heaviest or lightest limb.

3. Even and straight action, and when sent to walk and trot slowly down an incline, on hard macadamized road, stand straight behind him and see if all the joints extend and flex evenly and straight, or as near to this as you can possibly have it.

4. A good pedigree on both sides, with a certain amount of in-breeding to keep a family likeness in your produce.

5. A horse should be in perfect health during the season. If he should fall amiss from any cause whatever, stop him of his work, as he will not get good stock out of health.

Mr. Bourdass adds that he has invariably found a sire get better stock after ten years old than before that age, and that mares, as a rule, throw better colts after that age.

## Veterinary.

### Diseases and Accidents Incidental to Parturition.

BY F. C. GRENSIDE, V. S.

#### GARGET OR MAMMITIS.

These are terms applied to a congested or inflamed condition of the udder or mammary glands. The mare is seldom affected by this trouble when compared with its frequency in the ewe and cow, particularly in the latter. This comparative immunity of the mare is due no doubt to the smaller size of the glands, their less pendulous arrangement, and to the presence of several openings, at the end of each teat, that readily give exit to any undue accumulation of milk. This affection may occur at any time during the period of giving milk, but is usually met with within a few days or weeks after birth-giving; of course direct injury may cause it, even when the gland is in a non-secreting state. The glands with their corresponding teats which go to make up the udder, are separated from each other by partitions or sheets of fibrous tissue, and are consequently independent of each other in so far as the working of each gland is concerned, and generally remain separately affected in inflammation; but in some cases the inflammatory condition extends and involves more or less of the whole bag. Resulting in the loss of one or more quarters of a bag, as inflammation often does, reduces the value of an animal as a milk-producer, especially those that are used as milking machines, as cows are, and it also is apt to lead to a recurrence of the trouble after each birth. If a quarter is lost the increased secreting activity of the remaining ones compensates to some extent, but does not entirely make up for the partly impaired function.

#### SYMPTOMS.

The primary stage of "Garget" consists in a congested or caked condition of the udder, which is a more or less stagnant state of the circulation in the part. The bag becomes somewhat hard and enlarged at the affected part, but there is not the heightened color, and increased sensitiveness, which are such prominent symptoms in true inflammation, that so frequently occurs as a sequel to the congested or caked condition. In congestion the secretion is not at first much altered in character, the major portion of the milk appearing of its natural color and consistency, but there is often difficulty in drawing it owing to thread-like clots stopping up more or less the milk ducts and leading to the impression that there is no more milk present.

If prompt measures are not taken to remove the state of congestion we have to deal with the more serious trouble of inflammation, and its too frequently occurring untoward results. When the transition comes

from congestion to inflammation, it was stated that, in addition to an increased accession of swelling there was evidently more pain in the part, as well as greater hardness and heightened temperature.

The secretion of milk, which is now much lessened in quantity, becomes altered in character, being of thin consistence, colorless or straw colored, and semi-transparent, or it may be streaked with blood, and is sometimes curdled. The tenderness of the udder on the affected side gives rise to a stiffness of movement in the limb of that side, and there is often an indisposition on the part of a suffering subject to lie, for any length of time, on account of the pressure causing increased pain. When the inflammation is anything like intense, constitutional disturbance is evident, shown by impairment of appetite, dryness of muzzle, in the cow, at times, roughness or diminished sleekness of the coat, with a varying degree of constipation, and, in some cases, suspension of rumination.

#### CAUSES.

From the sudden manner in which the mammary glands are called into active operation after birth, and from the greatly increased quantity of blood sent to those parts, constitute a predisposing cause of inflammation. Although to mismanagement, in many cases, should be charged the existing cause of this trouble, yet in numbers of others it is hard to determine any tangible influence that can be said to operate in bringing about this condition. Of the existing causes the imperfect removal of the milk is the most constant. The reasons for this are carelessness on the part of the milker, or fear, if there is soreness in a teat. Cows should be stripped regularly twice a day when suckling their calves, for several weeks after calving, or until there is no chance of there being any surplus secretion.

Soreness or ulcers on a teat cause the mother to resist its young's desire to empty a quarter, which state of affairs may remain unnoticed until irritation results. Conditions which cause complete or incomplete occlusion of the milk duct; as little tumors, thickening of the lining membrane, constrictions in some part of the canal, or at the point of the teat; as also milk concretions.

Cows in which the secretion is very profuse should be milked three times a day; and mares absent from their foals for any length of time are relieved by the abstraction of their milk. Exposure to draughts or sudden exposure to cold, especially when heated, are recognized causes. In speaking of the undue accumulation of milk, as a cause, it should be mentioned that when the secretion is profuse prior to birth, it should be removed, otherwise garget may result. Amongst cows, and more particularly amongst sheep, in some cases it assumes an epizootic or an enzootic form, leading certain observers to conclude that it is a contagious affliction. In support of this theory fluid products of diseased milk glands have been injected into healthy teats, and there produced the disease, but this is not conclusive evidence of its being a specific disorder, as it may have resulted from the irritating character of the fluid, and like inflammations, might be caused by any other irritating or disease-producing matter. It is said that deep-seated inflammation of the udder often occurs during the existence of foot-and-mouth-disease, the virulent matter finding its way through the canal of the teat into the substance of the gland, and thus producing the trouble. From such evidence it is rational to assume that the existence of a virus peculiar to this malady is not essential to its production, in a herd or flock, when it attacks a number of animals. We have seen the dis-