

"The advantages of this length of stirrup are manifold, the three principal ones being that of obtaining a greater surface of contact, of assuring greater solidity in the saddle, and of better outlining the human form than does the cramped leg.

"With short stirrups the rider's weight is thrust farther back on the horse's spine, as it is comprehensible that when a man's knees are pulled up his seat must in consequence be displaced, because the length of his thigh remains unaltered.

"Thus with short stirrups the rider sits on the cantle and not in the middle of his saddle, which is incorrect, æsthetically as well as anatomically, because his weight is brought to bear on a weaker part of the animal's back.

"For this reason do lady's saddle-horses require

hard and firm the pitting is not so well marked. In rare cases little vesicles are formed, which is followed by some amount of sloughing. This occurs more frequently at the flexures of the joints when a limb is affected. Besides local symptoms, we notice more or less constitutional disturbance; the pulse becomes frequent and strong; shivering fits are noticed, temperature increased, and there is a loss of appetite, and lameness, if a limb be involved. In more severe cases the constitutional disturbance is greater. The tendons and ligaments, the fibrous covering of adjacent muscles, as well as the skin and subcutaneous tissues, become involved; the pain is excessive, the swelling hard, tense, and occupies a large extent of surface. In a variable period, purulent collections form in the muscles, or more

a writer in the *Live-stock Journal* (English) remarks: "The idea that the foal, as a rule, may be expected to take its size from its dam, and not from its sire, is one that is scarcely capable of contradiction, for the correctness of the theory is proved by the existence of some very big Hackneys which are sired by small stallions still living.

"So far as the international arrangements are concerned, I imagine that the majority of breeders will give the dam the credit of being responsible for them to a greater extent than the sire, but I rather incline to the belief that, as a rule, the latter has most to do with the temper of the foal. I do not mean by this the courage that the latter may be possessed of, as the cases which have come under my personal notice have left me undecided on the subject, though I rather incline to the belief that the faint-heartedness is more often transmitted by the sire than by the dam. Probably we shall never arrive at unanimity on such matters, but a very great deal can be learned by the exchange of experiences; and, surely, anything that throws a light on the science of breeding cannot fail to be valuable to horse-owners.

"Color, I am convinced, is more influenced by the sire than the dam, and I base my opinion upon what I have seen and what the studbook tells us. For instance, the Fireaways and Lord Derbys were for the most part browns, whilst Denmark, a chestnut, has transmitted his color to his stock, and hence, no doubt, the preponderance of chestnuts at the present time, for the Denmark family, thanks to the excellence as sires of some famous stallions, invariably monopolize the lion's share of the prizes throughout the season. At the same time there can be no denying the existence or certain mares which invariably throw bay or brown foals. I saw one sold a few months ago, and a hunt through the studbook proved the correctness of this statement that she had always thrown bay foals. Still, there are exceptions to every rule, and, therefore, breeders are compelled to base their calculations upon the law of averages. There are so many things that are unexplainable in connection with breeding, totally irrespective of the laws of heredity, that it appears hopeless to unravel them. Still, the pursuit of knowledge in such matters must always be of interest to the lover of horses. For instance, many of us would be glad to be able to account for the fact that some horses are colt and others filly breeders; why some families should mature early and others late; and how it comes about that a grand-looking, brilliant-acted horse may never get a foal worth his halter, whilst his brother, which, so far as appearances go, is not worth forty pounds, is a brilliant success at the stud. If these mysteries could even be partially solved, the task which breeders have to face would be far less onerous than it is, for the contemplation of such and other contradictions which exist almost makes one despair of arriving at any definite theories upon horse-breeding.

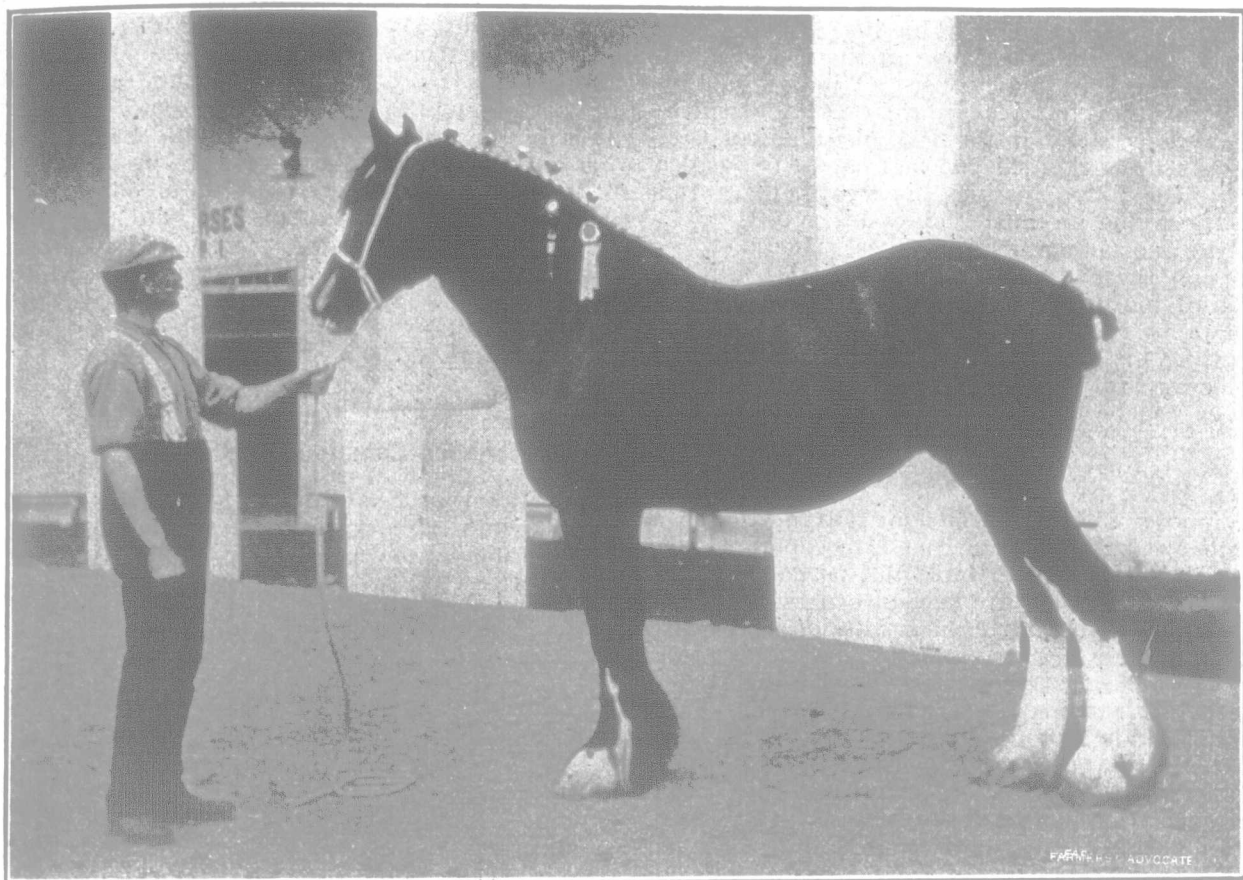
"The extraordinary development of the Hackney, however, during the past few years, has proved that the following out of certain principles of breeding may reasonably be expected to be succeeded by certain definite results, but there will always exist an element of uncertainty as to what a horse will get or a mare will throw. I suppose there is the influence of back blood to account for this, and the prepotency of certain strains and individual animals, but one becomes bewildered when one attempts to account for the phenomena—they can be termed nothing else—that occasionally appear."

STOCK

Fall Litters of Pigs.

Among the breeders of purebred pigs the dictum seems to be accepted that fall litters are unsatisfactory for many reasons, and that opinion has spread so that prospective buyers almost generally ask for pigs from spring litters, or if fall born pigs are taken want such at a marked reduction in price. This opinion is by no means solely held in Canada but as may be noted by the following excerpts from the *American Swine-herd* is common belief in the United States:

"I heard a breeder say the other day that fall pigs were a necessary evil with him because he



CLYDESDALE MARE, LADY ROTH A

Champion at the Royal 1905 and reserve champion at Winnipeg and Brandon 1906. The property of W. H. Bryce, Arcola, Sask.

to have strong backs, the side-saddle's seat being placed behind the horse's natural carrying point.

"The difference in the "strength of the push" existing between the long and the short stirrup can be ascertained in two ways: 1st, theoretically 2nd, practically.

"1st, Theoretically.—If a compressible object, representing the horse's body, is held between the thumb and forefinger, representing the rider's thigh and leg, it will be seen that the wider apart the two will be kept, representing the "long stirrup," the lesser will be the compression brought to bear on the said object. And vice versa.

"2nd, Practically.—Every horseman with a little experience has had to ride some time or other weak-backed horses, and has thus been able to appreciate the influence which the difference in the manner of distributing his weight in the saddle exercises on a horse's back."

Diseases Resulting from Wounds.

ERYSIPELAS.

Erysipelas occasionally occurs as a result of a complication of wounds. It may be defined as an inflammation of the skin and underlying tissues, characterized by a diffused swelling of the parts affected, which has a remarkable tendency to spread, and is dependent upon some unascertained alteration in the blood.

Symptoms.—In an indefinite period, but usually about the third or fourth day after the infliction of an injury, the skin in the immediate vicinity of the wound is noticed to be swollen, smooth, shining, hot, tender and painful; the swelling gradually extends in all directions from the wound, embracing, if a limb be affected, its whole circumference in the course of a few hours. The swollen surface pits on pressure (that is, when pressed it has a doughy feel, the finger sinks into the tissues and the impression does not quickly disappear) where muscular tissue is present, but where the subcutaneous tissues are

deeply between the tendons and ligaments, which, on being opened, discharge a watery pus which in some cases contains shreds or masses of gangrenous tissue. The systemic disturbance is severe, rigors are frequent, pain acute; the pulse, at first full and strong, becomes frequent, small and feeble; the respirations hurried; the bowels generally constipated, and feces covered with mucus; the urine scanty and high colored. The appetite is lost, but the thirst usually excessive. Occasionally the inflammation extends to the articulation nearest the injury, and the case becomes complicated with open joint.

Treatment.—A brisk purgative of 6 to 10 drams aloes, according to the size and condition of the patient, with two drams ginger, should be given. The swollen parts should be fomented frequently with warm water, or if practicable, warm poultices applied. After the purgative has operated saline diuretics, as nitrate of potash, in 3 to 4 dram doses, should be given twice or three times daily, and tincture of iron should be given in 6 to 8-dram doses, in a pint of cold water, as a drench, twice daily. The food should be of the best kind, and given in liberal quantities. In the more severe cases treatment must be more energetic. A purgative must be given, and the excitement and fever combated with aconite in about 20-drop doses of Fleming's tincture in one half pint of cold water, as a drench, every three or four hours, until the pulse loses its excessive strength and frequency. After the purgative has acted, the tincture of iron should be given in about 4-dram doses every three or four hours. Heat should be applied to the affected parts. If abscesses form, they must be opened, but it is advisable to abstain from the use of the bistoury unless pus is present, as the admission of the air into the tissues is apt to cause sloughing.

"WHIP."

Breeding of Carriage Horses.

Discussing the question of the relative influence of the sire and dam in the breeding of Hackneys,