



Ratcliffe Forest King.

Shire stallion; foaled 1904. First prize and champion, Royal Show, 1907. Shown by F. Farnsworth. Sire Lockinge Forest King.

his town house, which used seven dozen a week. His man came to our place and bought from us the seven dozen of eggs, for which we charged him sixty cents per dozen. Our hens were educated hens, living by labor, under naturally rigorous conditions."

A. E. BURKE.

HORSES.

LAMENESS IN HORSES.

(Continued.)

A SPRAIN OR STRAIN.

A sprain or strain may be defined as violence inflicted upon a soft structure, with extension and often rupture of its fibres. A sprain may be suddenly caused by violent extension or stretching of soft structures, or by repeated slight stretching without a rupture of fibres, in which case the repeated tension produces an altered nutrition, which results in inflammation of the part, and finally to a softening of some portion of the fibres, by which they lose their toughness and become practically broken across. A slight sprain may be practically merely a bruise, while violent and excessive extension may rupture the whole structure of the part. Extension is not always the cause of a sprain; a muscle may be sprained by the opposite condition, viz., violent contraction, by which the fibres may be broken across or the tendinous fibres torn from their attachments at either end of the muscle. Sprains produced in this way are sometimes noticed as the result of the violent contractions of the muscles we notice when a horse is being thrown with hobbles or sidelines, or by violent efforts to loosen himself when down; in vain efforts to regain his feet when halter-cast, etc., etc. Sprain may be confined to the sheaths or fibrous coverings of the muscles (each individual muscle having a separate fibrous covering called a sheath), but these are of minor importance compared with sprain of muscular fibre, tendons or ligaments. Sprain of muscles or tendons are found in various parts of the body or limbs. A horse may sprain the muscles of his neck by falling on his head. If the fall be severe, the sprain may be complicated by injury or even fracture of some of the bones of the vertebra, and this may cause sudden death. The muscles of the back may be sprained by the hind feet slipping forward. When a muscle is sprained, the accident is succeeded by pain, swelling, heat, and loss of function. An inflamed muscle cannot contract properly, the loss of contractile power being in proportion to the severity of the sprain; hence, in some cases the symptoms simulate those of paralysis. The swelling of an inflamed muscle is very often succeeded by a loss of substance, a wasting away, called atrophy; and sometimes by fatty degeneration of its fibres, whereby they lose their red, fleshy appearance and assume that of whitish threads of fat. When examined by a microscope, the contractile tissue, called the sarcous elements, is seen to have been replaced by glistening oil particles, so that the function of the muscle is temporarily completely destroyed. If the whole muscle is involved, its contractile power no longer exists. This loss of power will, of course, vary

vessels and the exudate out into the tissues as a result of the same. Second, atrophy, or a wasting away of muscular tissue, from the pressure of this exudate upon the muscular fibres, and from loss of function. It is a well-known fact that if, from any cause, a muscle does not perform its functions, it will gradually become smaller from inactivity. If this want of function be accompanied by the pressure noted, the atrophy will be more speedy and better marked. Third, fatty degeneration of the sarcous elements, and permanent loss of contractility.

Treatment for sprain depends to some extent upon the seat of the accident and the tissues involved, but the general treatment may be said to be: First, locate the lesion, give rest, make comfortable in a box stall, if possible; give a slight purgative, as 6 drams aloes and 2 drams ginger, and feed lightly. If the sprain be very severe, causing complete loss of power of a limb or limbs, it is well to place in slings. Bathe the affected parts long and often with hot water, and, after bathing, apply an anodyne lotion, as 1 ounce laudanum and 4 drams acetate of lead to 8 ounces water, until the acute inflammation and soreness has disappeared, then change to cold water and camphorated liniment. If the lameness is persistent, apply a smart blister, as 2 drams each biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off the parts, tie so that the patient cannot bite them, rub the blister well in daily for two days; on the third day wash off and apply sweet oil; let patient loose now, and oil every day. It may be necessary to repeat the blister every month for a few times. The blistering not only has a tendency to cure the lameness, but, by stimulating absorption, tends to reduce any chronic swelling that may remain from organization of the exudate that was thrown out during the inflammatory stage of the lesion. "WHIP."

It is astonishing how conservative Eastern farmers are in the matter of economizing horse-flesh. Travelling through the country we often see a farmer and his hired man at work in the field, each plowing or doing other work with a two-horse team. Double up; work four horses abreast, and let the hired man earn his wage.

PROGRESS IN HORSE-BREEDING.

It is only since the formation of Studbooks and Breed Societies, and the growth of the show system, says a writer in the London Live-stock Journal, that the rank and file of English horse breeders have seriously attempted to improve their own stock.

It was during the eighties that Britons woke up to the fact that they possessed several kinds of horses which were the best in the world, and that by keeping the breeds pure and recording the pedigrees much benefit would accrue to those who bred them and cared to take the trouble in the selection of parents and the keeping of records. The Thoroughbred had long been looked upon as the horse for speed, and the doings of the celebrated Eclipse had proved the worth of this breed for riding purposes. The General Studbook (Weatherby's) had then been in existence for many years. Another light-legged breed which could in those days claim to be an old-established one was the Hackney, noted for its knee action—"trotting of its own courage," as an ancient writer called it. The Royal Agricultural Society instituted a class for them at its 1848 show, but it was not till 1883 that the Hackney Horse Society was founded, and it is during the twenty-four years that an annual show of the breed has been held in London that the type has been fixed and the commercial value of prizewinners discovered.

During the past twenty years, the most popular breed of horses in England has unquestionably been the Shire (or old English cart horse), so named in the reign of Henry VIII., when the improvement of the breed really began. Others, like Bakewell, followed it up, and many pedigrees can be traced back nearly 100 years. Still it was not until 1883 that Shire horses had their own classes at the Royal Show, but a band of enthusiasts were working for the breed, and in 1877 the Shire Horse Society was established, and in 1880 the first London Show was held. The entries on that occasion numbered 110, and they have since reached 860; but, to prove the carelessness as to soundness which existed in those days, it is only necessary to say that a considerable number of those examined were cast by the veterinary surgeons, chiefly for sidebone. The growth of Shire-horse breeding was, however, phenomenal from the outset. He is above everything a cart horse, which will do the work of the farm for three or four years and then make a good price; therefore, it is not surprising that twenty years should see a great improvement in the breed, and hundreds of tenant-farmers breeding and exhibiting high-class specimens of it, and only last autumn the foals of farmers made as much as 150 gs. by auction. The value of Shires for draught purposes was quickly recognized by American and other foreign buyers, and about twenty years ago a large export trade in them developed, the number of export certificates granted in 1889 being 1,264, which was a capital performance for an eleven-year-old society. Since that time farmers from every English county have joined the ranks of breeders, and as they naturally want to participate in the honors obtainable for those who breed winning animals at the London and Provincial Shows, and as no unsound one is awarded



Copmanthorpe Performer (9670).

Hackney stallion, chestnut; foaled 1904. First in class and reserve champion, International Show, London, 1907. Sire Garton Duke of Connaught.