Veterinary Prescriptions for Farm Use.

BLISTERS.

Blisters are irritant applications, used for the purpose of creating what is known as "counter-irritation." They cause a superficial irritation, the results of which may have an effect upon organs more or less deep-seated, or they may be applied for the purpose of stimulating the actions of the absorbents, and thus tend to reduce enlargements of different kinds. In the early ages it was thought that two inflammations could not exist at the same time; hence, in case if inflammation of an internal organ, for instance, inflammation of the lungs, it was claimed that if inflammation of the skin covering the lung cavity were created, the internal inflammation must of necessity be allayed, hence the name "counter-irritation."

Counter-irritation is practiced at present with the idea of producing the same results, but the theory of action is different. The blood vessels of inflamed areas are always congested; hence, if artificial inflammation be set up, the blood vessels of the skin become engorged, and this has a tendency to reduce the engorgement of the vessels, and hence reduce inflammatory action of deep-seated organs in the same region. The effects of a blister probably depend as much upon its application as upon the ingredients it contains. If simply applied to a surface, the effects are slight, but if applied with smart friction (well rubbed in) they are well marked. Blisters may be in the form of a paste or liquid. The active principle of the ordinary paste blister is either biniodide of mercury or cantharides. Many practitioners prefer a combination of the two. When either is used, it is mixed with lard, lanolin or vaseline, and the strength of the mixture will depend greatly upon the action desired, being one part of the drug to four, six or eight of the latter. Where well marked counter-irritation or blistering is desired, the following gives good results:

Biniodide of mercury, 2 drams.
Powdered cantharides, 2 drams.
Lard or vaseline, 2 ounces—(mix).

This, of course, is one to four, and it may be made stronger or weaker, if desired. The seat of application should be clipped, and the animal tied, or some arrangement made whereby he is unable to bite or lick the parts. The blister causes an irritation, and if the patient be at liberty he will lick or bite the parts, and thereby get some of the blister on lips, tongue, or may bite sufficiently hard to scarify the skin of the blistered parts. The blister should be applied a little at a time, with smart friction, then a little more, etc., until 15 to 20 minutes have been spent in the application. In about twenty-four hours a little more blister is rubbed well in, and in about twenty-four hours longer sweet oil or some other non-irritant lubricant should be applied. The patient's head should now be let down, and if he can be provided with a box stall, it is advisable. The blistered parts should be oiled every day until the scale raises off, which is generally in ten days to two weeks, when, if necessary, another blister can be applied, as at first, and, where further blistering is desired, it should be done once in every four weeks. While blistering in this manner causes the hair to fall out, it does not destroy the hair folicles, provided reasonable attention to directions is observed; hence, there is no danger of causing an area permanently devoid of hair.

There are certain ingredients, such as nitric acid, sulphuric acid, arsenic, corrosive sublimate, etc., which have well-marked blistering and corrosive actions, and, if used, except in very small quantities, in blistering applications, will surely destroy the hair folicles and leave a permanent scar or bare spot. Blemishes of this nature are often noticed after the application of many of the proprietary medicines which are advertised as a "sure cure" for nearly all the diseases to which the bones, muscles, tendons, etc., of a horse are liable. In cases where a paste blister is used it is necessary to give the patient rest for at least two days, and wise to continue the rest for at least a few days longer, until the acute, inflammatory action has become allayed.

In cases where it is necessary to continue the work or drive the patient during and immediately following the application of a blister, a liquid preparation is generally used. This avoids the necessity of tying the patient so that he cannot reach the parts with his mouth, as, there being practically none of the irritant on the hair or surface of the skin, he cannot irritate, lips, etc., with it. Then, again, the ordinary liquid blister is not usually of as great strength as the paste blister; it does not cause such acute irritation, and usually requires repeated application to cause well-marked skin irritation. We, of course, refer to liquid blisters prescribed by those versed in such matters, not to some of the proprietary medicines advertised, such as the different caustic balsams, etc., which quickly produce more marked superficial irritation than a safe paste blister. Liquid blisters are often known as "sweat blisters," from the supposition that the exudate they usually cause, and the results that follow are due to a sweating of the parts. Two drams of either cantharides or biniodide of mercury, mixed with four ounces of alcohol, makes a good liquid blister. Of course, the mixture can be made either weaker or stronger by using less or more of the drug, in proportion to the amount of alcohol. The usual method of using preparation of this kind is to apply a little with smart friction once daily until the parts become roughened, then apply oil daily until they become smooth again; then apply the blister again, as at first. The application of a blister in any form, with the idea of curing some bone disease, as bone spavin, ringbone, splint, etc., is from the assumption that the counter-irritation caused by the blister increases the deep-seated inflammation and hastens its course to completion. The course of bone diseases of joints, such as bone spavin and ringbone, usually destroys the articular cartilage, covering some of the bones of the joint, and a joining together of said bones by bony deposits. Counter-irritation, such as firing, blistering, etc., hastens the process (called anchylosis), and when it is completed irritation ceases and pain ceases, and if the bones involved are not those of a joint, or part of a joint, in which motion is considerable, lameness will disappear, and whether or not a more or less marked stiffness will remain depends upon the extent of said motion.

"WHIP."

(To be continued.)

What Constitutes the Standard and Thoroughbred Horse.

Will you kindly give me through the columns of your paper the difference between Standard-bred and Thoroughbred horses. I have a very clear description of the Thoroughbred in Sanders' work on live stock, but no information as to what Standard-bred means to the uninitiated.

E. D. L.

The Standard-bred and Thoroughbred are two distinct breeds of horses, although considerable Thoroughbred blood was used in the early days in forming the breed now known at the Standard-bred. The Thoroughbred horse originated in England, where horse-raising was introduced by James I., who imported an Arabian stallion. All writers of the history of the Thoroughbred refer to the three horses, The Godolphin Barb, The Byerly Turk, and The Darley Arabian, which were extensively used in the founding of the breed. The Godolphin Barb was brought to England in 1728, having been foaled in Barbary in 1724. The Byerly Turk was used in England about 1689 or 1690, and The Darley Arabian was purchased in Syria for use in England in 1706. The blood of these three horses had a very marked effect in establishing the breed known to-day as the Thoroughbred. Following these came three English-bred horses: Herod, in 1758; Matchem, in 1748-1781, and Eclipse, in 1764. This latter horse won no less than eleven King's Plates.

It is well known that the horse extensively used in England previous to the importation of the Barb and Arabian sires was a heavy type of animal, suited to carrying armored soldiers and hauling war chariots. With the change in the war equipment of the country, lighter horses were needed. Gradually armor was discarded and chariots done away with. Racing became popular, and speed was necessary in the lighter horses. This was accomplished by using the Barb and Arabian sires on the lighter native mares of the country, keeping the most promising horse colts for use at the stud, and finally the breed through the blending of Arabian, Barb and Turkish blood with the light English mares, became established.

This combination of blood gave the Thoroughbred speed, stamina and powers of endurance unequalled by any other class of horse. The Thoroughbred is the fastest horse of them all, but his records are all made at a running gait and under the saddle.

The Standard-bred horse is a trotter. Like the history of all breeds of live stock, that of trotting horses is very old, yet the origin is somewhat obscure. Trotters were common in certain counties in England at the beginning of the nineteenth century. It is, however, the American type of trotter that we are most interested in. Running horses were imported into the United States from England in the seventeenth century. Two stallions were, however, largely responsible for the origin of trotting blood in the United States, and these were Messenger, a Thoroughbred tracing to Darley Arabian, foaled in 1780, and brought to America eight years later. Messenger was the sire of Mambrino, who sired Abdallah, a famous breeder of trotters. Bellfounder, the other pillar of the foundation, was a trotting horse, foaled in 1815, and imported in 1822. He was what was then known as a Norfolk trotter. So began the history of the American trotter. As time went on, various families of trotters came into prominence, owing to the remarkable work at the stud and speed performances of certain well-known sires of the time. Thus was established such families as the Hambletonian, Mambrino, Morgan, Hal Pilot, and several others.

In 1876, the National Association of Trotting-horse Breeders was organized, and about six years later the constitution was amended so as to define a Standard-bred Trotter. The rules of registry in the American Association are:

1. The progeny of a registered Standard trotting horse and a registered Standard trotting mare.

2. A stallion sired by a registered Standard trotting horse, provided his dam and grandam were sired by registered Standard trotting horses and he himself has a trotting record of 2.30, and is the sire of three trotters with records of 2.30 from different mares.

3. A mare whose sire is a registered Standard trotting horse, and whose dam and grandam were sired by registered Standard trotting horses, provided she herself has a trotting record of 2.30, or is the dam of one trotter with a record of 2.30.

4. A mare sired by a registered Standard trotting horse, provided she is the dam of two trotters with records of 2.30.

5. A mare sired by a registered Standard trotting horse, provided her first, second and third dams are each sired by a registered Standard trotting horse.

The pacing standard is identical with that of the trotting standard, only that the speed required is 2.25 throughout, and the progeny of a registered Standard trotting horse, out of a registered Standard pacing mare, or of a registered Standard pacing horse out of a registered Standard trotting mare are eligible for registration.

The rules for registry of Thoroughbreds in Canada were published in connection with our report of the annual meeting of the Canadian Thoroughbred Horse Society, in our issue of February 8th, 1912.

The two breeds are essentially different in type, as one is bred for running purposes, and the other for trotting purposes.

Tight Overdraw Reining.

Some objections to the overdraw check-rein, especially when it is drawn too tight, are cited by M. W. Harper, in his new book, "The Training and Breaking of Horses." Among others, the most noticeable are that it holds the horse's head in such a position that he is unable to see the ground immediately in front of him, so that he is very likely to stumble on obstacles in the road. Further, it holds the animal's head in such a direction that he cannot pull efficiently. This is particularly true in ascending a steep grade. The horse is unable to lower his head, and hence can put little power into the collar. The horse that is stalled when thus reined can often pull the load if unreined, or if the driver will ride him, thus bringing forward the center of gravity and enabling the animal to put more pressure into the collar. The overdraw check-rein is also very hard on the horse's back and front limbs in descending a grade. When drawn too tight, it holds the head and neck in such an unnatural position that they soon become numbed, and the horse is seen to toss his head from side to side in search of relief.

LIVE STOCK.

The Conflict with Tuberculosis.

It has been intimated that the United States farmers sustain an economic loss of $14,000,000 per year because of bovine tuberculosis, and there is little reason to suppose that in Canada the loss is very much less, proportionately. What can be done to abate the evil? Through the Canadian Conservation Commission, attention is again called to the almost general need for better-lighted and better-ventilated stables. In the second place, the tuberculin test should come into universal use. This should be followed by the segregation of animals reacting from the test, and if the cases are advanced, their slaughter may be advisable. And thirdly, a comprehensive system of meat inspection for the home market is an immediate necessity. What is chiefly required is a little more common sense, along with additional window glass, and some simple system of bringing fresh air into the stables. Concerning the tuberculin test, it is an almost unfailing indication of the presence of tuberculosis, if it is carefully and skillfully used. As an illustration of its accuracy, the results obtained by the United States Bureau of Animal Industries may be cited. During 15 years, some 400,000 cattle were tuberculin tested. In this number, there were 37,000 reactions—that is, diseased cattle—the large majority of which were dairy cattle. In all, 24,784 of these animals were slaughtered, and in 98.39 per cent. of them were found lesions of tuberculosis. A number of the States report even higher percentages. The tuberculin test is, therefore, an almost unfailing indication of the presence of the disease; it is inexpensive, and it is harmless.