

## HORSES.

## Untoward Results of Castration.

(Continued.)

**PHYMOSIS** is that condition in which the penis is imprisoned within the sheath, and, on account of excessive swelling of the latter, especially at the anterior extremity, cannot be protruded. It is seldom serious, and attention should be directed towards reducing the swelling of the sheath by fomenting with hot water, and, if necessary, scarring, to allow escape of the accumulated serum. It is seldom the penis is involved in the swelling, and when that of the sheath has been dissipated a cure has been effected.

**PARAPHYMOSIS** is the opposite condition to phymosis, viz., the penis is protruding, and cannot be retracted. The causes are the same, viz., excessive swelling of the sheath. This is liable to be more serious. The swelling of the sheath forms a constricted neck around the pendulous penis, arrests to some extent its circulation and produces a tense inflammatory swelling. Treatment to reduce the swollen condition of the sheath should be the same as for phymosis. In addition, the penis must be included in the fomentations, and in extreme cases scarified. It should be supported in a suspensory bandage, and this may with advantage be used for the application of warm poultices. When the penis is suspended in this way it is good practice to give the patient exercise, as this tends to remove venous engorgement and excite absorption of the fluids. When the condition exists for considerable time there is a danger of partial paralysis of the muscles which retract the penis, hence it is wise to treat early and energetically, and as soon as the swelling of the sheath subsides sufficiently endeavor to force the penis back into position by careful and gentle manipulation.

**HERNIA**, or the protrusion of a greater or less volume of intestine or omentum through the opening in the scrotum occasionally occurs shortly after the operation. If omentum (the serous membrane that suspends the intestines) only protrudes treatment consists in cutting it off as high up as possible. If the intestine protrudes the case is much more serious, and prompt and careful treatment is necessary. If the volume be considerable it should be suspended with a suspensory bandage to prevent injury, and then the animal must be cast as for castration, firmly secured, placed upon his back and held there. The bandage must now be removed and the exposed intestine or omentum thoroughly washed with a five-per-cent. solution of carbolic acid, and carefully returned. Great care must be taken to not scarify or bruise them. Then the opening into the abdomen, called the external inguinal ring, should be closed with carbolyzed catgut or silk sutures. If sutures of this kind are not on hand, those made of hemp, slightly waxed with beeswax and disinfected with carbolic lotion, may be used, and the ends allowed to project two or three inches below the scrotum, in order that they may be pulled out before the wounds in the scrotum have quite healed. If the first-mentioned sutures are used they will become absorbed, but ordinary sutures will not, and if not removed, as stated, will act as foreign bodies and cause the formation of abscesses after the animal has apparently fully recovered from the operation. After the operation has been performed as stated, the patient must be allowed to rise, and should be kept as quiet as possible for two or three days, after which exercise should be given to dissipate swelling, and there is little or no danger of a recurrence of the hernia.

**SCIRRHUS CORD** is an enlargement of the end, and in many cases, of a considerable portion of the severed cord, due to a microbe or germ that gains entrance after the operation. This inflammatory condition occurs more frequently when clams have been used than in other cases, especially when the operator neglects, when removing the clam, to break down with the finger adhesions that frequently take place between the cord and the scrotum, and thereby allow the cord to retract. The symptoms are easily noticed. The wounds do not heal readily, and in a few days, or in some cases longer, a fullness of one or both sides of the scrotum will be noticed, both by sight and manipulation; it resembles an animal that has not been castrated. Treatment consists in casting the animal, breaking down the adhesions between the diseased cord and surrounding tissues, and severing the cord above the diseased portion with an ecraseur or emasculator, or applying fresh clams. This is a much more difficult operation than the first.

"WHIP."

## Tell Your Wants

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## Points on Draft-horse Breeding.

A writer on the subject of breeding Shires, referring to the various points to be observed in mating and selecting breeding stock, offers some remarks which are as pertinent to Clydesdale, Percheron and Suffolk breeding, generally speaking, as to that of Shires:

It is often the experience of breeders of Shires that the largest stallions do not always get the most sizeable stock. It would certainly not be advisable to breed from a stallion whose sole recommendation is great height at the withers, but which lacks a proportionate amount of substance and weight. The thing to look for in the Shire stallion is roominess of build and a big framework; these are of more importance than mere height. For breeding purposes a big-made but not over-grown stallion is required. There are not a few horse-breeders who are not able to distinguish between a stallion that is built on big lines and roomily made and one that is overgrown, and yet it is of the greatest importance to the successful breeding of big Shire horses that the one should not be confounded with the other. A big and roomy stallion of symmetrical development and with a large framework will generally get big stock when suitably mated to mares of the right description. On the other hand, an overgrown stallion which is tall merely but lacks scale, and is not built on roomy lines, will more than likely get foals which eventually show a want of size.

When aiming at breeding Shire horses as big and weighty as possible, it is essential that the mares should be big and deep, and that they should possess a deal of roominess. There must be plenty of depth and width about the body; if a big foal is wanted it must be seen that the mare is sufficiently big to afford ample room to her unborn offspring. If the mare is not roomy, and lacks depth and breadth of body, the space available for the growing fetus will not be so great as it might be, and development to the utmost possible size is naturally impossible. Besides looking for plenty of depth and width of body in the brood mare, the breeder should also see that the points of the hip bones are wide apart; the more widely they are apart from one another the better. As a matter of fact, it is always found that in a roomy Shire mare built on really big lines there is great width between the points of the hip-joints. Narrowness between them is highly objectionable in Shire mares intended for breeding purposes. It

they produce their foals at an early date. Early foals generally grow into the biggest horses and develop the most size, and the breeder will do well, therefore, to be particular about getting his mares to foal sufficiently early in the spring.

It will very frequently be found that the first foal of a young mare does not grow so big as her subsequent foals, and when a brood mare becomes very old her foals are generally apt to lose size. These points are worth noting when going in for the breeding of the heaviest and biggest stamp of Shires. In selecting fillies for breeding purposes, it is certainly best to select fillies bred from mares when the latter are in their prime. Loss of size may easily result when the first foal of a young and immature mare is retained for breeding purposes. If a filly is put to the horse and breeds a foal at a very early age, this may have a certain stunting effect upon her further growth and development if she is not fed liberally while in foal, or if she is backward in condition and growth when the service takes place. The age when a Shire filly may suitably be put to the horse for the first time without risk of her growth and development being interfered with by breeding from her depends upon circumstances. If she is well developed, of satisfactory growth, and forward in condition, she can well be put to the horse at two years old without there being any risk of loss of ultimate size. Under these circumstances it is, however, of the greatest importance, as has already been pointed out, that the in-foal filly should be liberally treated in the way of food; she will require to be fed better than young fillies that are not carrying foals. When a filly is backward and lacks sufficient size, then it is not desirable to breed from her when she is two years old; in her case the breeder should wait till she is three years of age before putting her to the horse. With a view to breeding as big a foal as possible from a young Shire filly, it is best to breed her to a mature stallion not less than six years old. By mating together an immature stallion and an immature filly, the progeny will generally be smaller than when the sire is a mature horse.

## Prevention and Treatment of Joint Ill (Navel Ill) in Foals.

This scourge of the stud, nowadays, is best handled by preventive measures; curative attempts are rarely successful. The disease is not confined to any country, but seems to thrive especially where horse-breeding is carried on and foaling occurs indoors.

An Old Country authority suggests that the navel string (umbilical cord) should be tied with a ligature of strong, soft thread, well soaked in a solution of carbolic (1-20) or corrosive sublimate (1-100), and that the cord itself should be painted with some protective preparation, such as collodion (if used, keep lighted lamp and matches away, as it is inflammable), to which is added one-tenth part of carbolic acid or iodoform. A cheap mixture is one of corrosive sublimate in one thousand of methylated spirits, or the following: Carbolic acid, 2 ounces; camphor, 5 ounces; resin or shellac, 1 ounce; methylated spirits, 15 ounces.

But there may be readers unfortunate enough to have animals infected and not willing to destroy them without an attempt at cure. As the odds are long against recovery, we may take the risk of heroic measures—"kill or cure," as it is said. A four-per-cent. solution of formalin injected into the points over the swelled joints by means of a fine hypodermic syringe, has been known to have an excellent effect; so has a five-per-cent. chinosol lotion, and the like strength of iodide of potassium in solution. The internal administration of antiseptics in doses short of being poisonous is worth trial. Twenty to sixty drops of pure carbolic acid in two drams of glycerine and two tablespoonfuls of water, night and morning, or dram doses of chinosol in a few ounces of water, may be given. Whether or not the internal treatment is tried, we may quite safely, and with some hope of success, if not much, daily rub the enlarged joints with glycerine of iodine, which is a penetrating preparation of iodine that does not readily blister if frequently employed. It is important to keep the little patient feeding, and if appetite is not lost he may be helped to the teat or bottle with milk drawn from it.



Leek Advance.

Three-year old Shire stallion. Owned by Mr. A. Nicholson, Highfield, Staffordshire. Winner of many prizes, including London Shire Show, 1905.

should further be seen that the hind quarters are not too short and compact in the brood mare. The quarters of the Shire are at best not by any means remarkable for their length; on the contrary they are, comparatively speaking, shortish. It is certainly not desirable to breed from a mare whose quarters are particularly short and wanting in scope. The quarters, like the barrel, should be as roomy as they can be, and they should possess plenty of development. Taking a rear view of the mare, she should show great width; the broader she is the better, provided, of course, that symmetry of build is not interfered with. There can be no two opinions as to the importance of plenty of breadth in the brood mare when breeding big and sizeable Shire stock. Breadth of body is due to long, well-sprung ribs, and to a large and wide shape of the pelvis, and these two points are, therefore, of importance, and should receive due consideration from the breeder of Shires.

With a view of getting the maximum amount of size in young Shire stock, it is very desirable that the mares should be put to the horse early in the season, so that