

Most important of all—Horses handled gently, neither struck, nor yelled nor sworn at.  
A veterinarian called promptly if horse is sick, and recovery not left to chance or quack medicines.

### Veterinary Prescriptions for Farm Use.

#### INSECTICIDES.

Insecticides are used for the destruction of the different varieties of insects or lice by which the various classes of farm animals are troubled. There are very many drugs which destroy insect life; some can be used with impunity, without danger to the health of the patient, while others are equally poisonous to both patient and insects, hence must be very carefully used. Carbolic acid in a 5-per-cent. solution, acts well, and if applied over only a limited surface at a time, is reasonably safe to use; but it is readily absorbed by the vessels of the skin, and if used too freely or over too great a surface, will, by absorption, exert its poisonous action, the same as if given by the mouth. This applies especially to dogs, which are very susceptible to its action, and from whose skin the acid is readily absorbed.

Any of the commercial sheep dips, if used according to directions, give good results in most cases. A warm 5-per-cent. solution of Creolin, Zenoleum, Kreso, Phenyle, West's Fluid, Jay's Fluid, or other of the coal-tar products, also give good results. Any of these applications require to be used at intervals of about a week, as, while they destroy insect life, they do not destroy their eggs, hence must be used when a fresh brood hatches out. A safe and effective preparation is an infusion of stavesacre seeds. One ounce of the seeds is boiled in water sufficient to make a quart of the infusion. This can be used freely with impunity, as it is not poisonous to animals. If the seeds be boiled in vinegar, the infusion will destroy the albuminous coverings of the eggs in addition to killing the lice. A solution of corrosive sublimate, say 15 grains to a pint of water, also destroys the eggs, but it is poisonous to animals in such small quantities that it must be used only by careful persons, and care must be taken that the patient may not be able to swallow it by licking himself or otherwise. Mercurial ointment is also an excellent insecticide, but its poisonous nature also necessitates very careful application. Almost any greasy or oily substance well rubbed in is effective as an insecticide, but such applications attract so much dirt and dust, and soil the clothes of the attendants to such an extent, that they are not much used.

#### PARASITICIDES.

Insecticides are also parasiticides. The principal use stock-owners have for parasiticides is for the treatment of ringworm, which is due to a parasite. Almost any of the insecticides mentioned will be effective, but the tincture of iodine, or an ointment made of 1 dram of white hellebore, mixed with 1 ounce vaseline, are especially effective. Either of these is too poisonous to be used freely, but in ringworm the areas to be treated are small, hence there is little or no danger. In order to effectively treat ringworm, the scales under which the parasites are found must be softened and removed either by oil or grease, or soap and warm water, in order that the application may reach them. When an ointment is used, the first application softens the scales, and during the second they are rubbed off, which, of course, exposes the parasites to the action of the application.

#### CAUSTICS.

Caustics are drugs that corrode or destroy animal tissue. They are applied for the removal of warts, small tumors, fungoid growths, a form of granulation commonly called proud flesh, which appears in wounds or cracks of low reparative power; ulcers, foot-rot in sheep, foul in the feet of cattle, etc. There are many caustics, as nitrate of silver, butter of antimony, sulphate of copper, nitric acid, sulphuric acid, muriatic acid, etc. The above mentioned strong acids are so actively caustic they should be used only by those thoroughly conversant with their nature, and are usually applied with a glass rod or splinter of wood. A pencil of the nitrate of silver is a convenient and comparatively safe caustic to use, as, with careful handling, there is no danger of coming in contact with tissue other than that upon which its action is desired. Butter of antimony is a favorite caustic with many practitioners. It is usually applied with a feather. It is a strong caustic, but when it is considered too strong it can be diluted to any strength by the addition of tincture of myrrh. Any of these caustics are usually applied once daily until the desired action is established. For the removal of proud flesh, two or three applications are all that is usually necessary; but, for the removal of warts or other growths, many applications are generally necessary.

#### CAMPBORATED OIL.

Campborated oil can be purchased at almost any druggist's, or can be homemade. It can be made of various strengths. The usual method is to place 1 ounce of camphor in a vessel containing a pint of sweet oil. Place this vessel in a larger vessel containing hot water, and keeping it hot until the camphor becomes dissolved. This oil is useful for local inflammation and soreness, and is considered especially valuable in cases of mammitis or inflammation of the udder. It has a soothing effect, and also forms a coating over the parts to which it is applied and prevents contact with the air, and is supposed to have an influence in checking the secretion of milk. It gives better results if applied warm.

#### COLLYRIA OR LOTIONS FOR THE EYE.

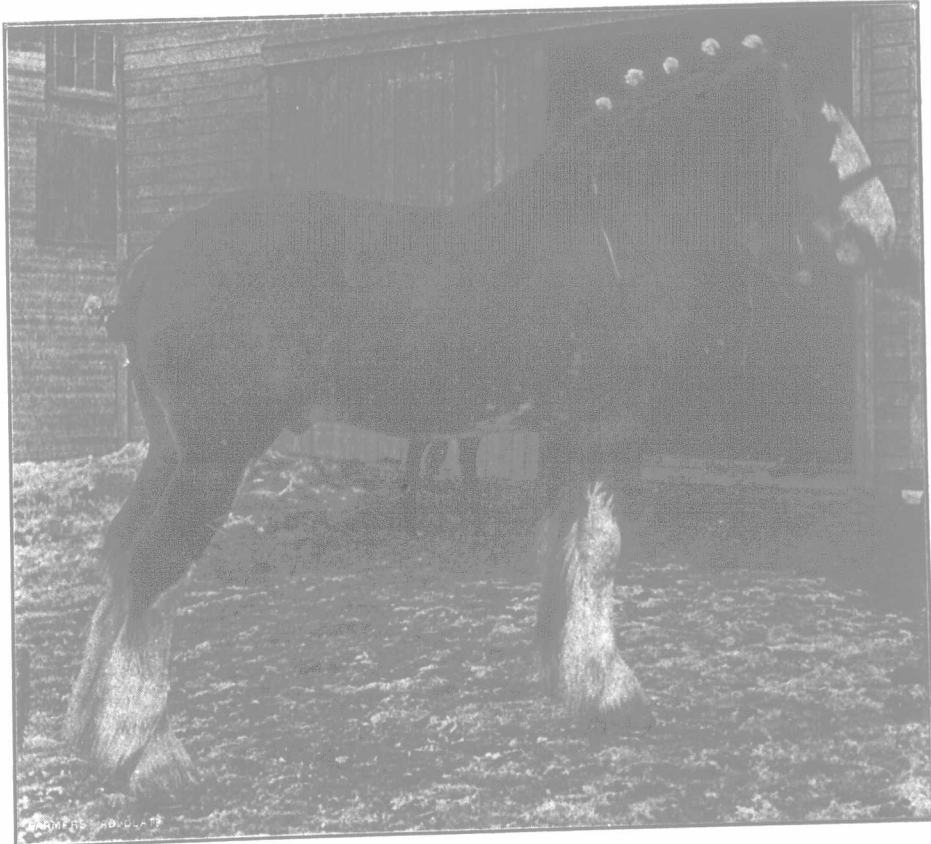
A lotion used to allay irritation or inflammation of the eye is called a collyria—a saturated solution of boracic acid in distilled or recently-boiled water, is much used. This is made by adding to the water all the boracic acid it will dissolve, and then filtering to remove all undissolved acid. Another favorite collyria is composed of:

Sulphate of zinc—10 grains.  
Fluid extract of belladonna—20 drops.  
Distilled water—2 fluid ounces.

A solution of 5 grains of atropia in a fluid ounce of distilled water is also used as a collyria.

When an opacity of the cornea (commonly spoken of as a scum or film over the eye) is present, a useful collyria consists of a solution of nitrate of silver in a fluid ounce of distilled water. A few drops of the collyria is introduced into the eye two or three times daily by the use of a feather or dropper, often after bathing well with hot water.

(To be continued.)



Connaught [13177] (15777).

Two-year-old Clydesdale stallion, imported by Wm. Mossip, St. Mary's, Ont., now owned by W. J. Henderson, Evelyn, Ont. Sire Hiawatha (10067).

#### Measuring Medicinal Doses.

We recognize the difficulty a person who has no graduate for measuring liquids nor scales for weighing solids may have in determining the doses given in formula, in grains, drams and ounces, etc. For measuring liquids, ordinary household utensils may be used, with reasonable safety, but, for determining the weight of solids, this is not the case, as the weight of medicines in proportion to bulk varies so greatly that no rule of measurement can be given, and the only method of determining such is by actual weighing or dividing into a given number of portions a bulk whose weight is known.

In measures of weight, a grain is the smallest. When the dose is less than that, it is spoken of as a certain fraction of a grain:  
60 grains make 1 dram, or dr.  
8 drams make 1 ounce, or oz.  
16 ounces make 1 pound, or lb.  
In measures of capacity, a minim (a drop of a certain capacity) is the smallest. When the dose is less than a drop, it is spoken of as a fraction of a minim or drop:  
60 minims make 1 fluid dram, or F. dr.  
8 F. drs. make 1 fluid ounce, or F. oz.  
16 F. oz. make 1 fluid pound, or F. lb.  
20 F. oz. make 1 pint, or pt.

2 pts. make 1 quart, or qt.

The following rules may be observed in measuring fluids when a graduate cannot be obtained, but it must be remembered that, as household utensils vary so much in size, those of ordinary size should be used.

Tumblers of ordinary size contain about 8 F. oz.  
Tea-cups " " " " 5 F. oz.  
Wine glasses " " " " 2 F. oz.  
Tablespoons " " " " 1 F. oz.  
Dessert spoons " " " " 2 F. drs.  
Teaspoons " " " " 1 F. dr.

or 60 drops.

" WHIP."

#### Hand-Feeding a Colt.

Could you kindly publish instructions for feeding a colt by hand, as the mother does not seem to have milk, and will not claim the colt at all. The colt is two days old. What should we give it? How much, and how often? The colt at present is bright and smart.

J. R.  
Middlesex Co., Ont.

A colt whose dam dies or has little or no milk, may be raised on cow's milk, but the work requires patience and intelligence. Cow's milk is considerably richer in fat than that of the mare. It also contains less sugar. The colt, when foaled, and for some time afterwards, especially under conditions which are not normal, is likely to be somewhat frail; and even under most favorable conditions, care is necessary to rear him. A mare's colostrum is the best "first food" of the colt, as it is usually of sufficient strength to start the action of the bowels, and at the same time is not so strong as to cause diarrhea. The usual trouble with cow's milk is that it causes purgation. For feeding the colt, select milk from a cow that has calved quite recently, preferably

one which gives milk rather low in butter-fat. The milk should be sweetened with brown sugar. Dilute the milk with about one-third its volume of water, and add the sugar at the rate of a good-sized teaspoonful to a teacup of diluted milk. Carefully mix the milk, sugar and water, and feed about one-half cupful every hour at first. An ounce of lime-water added to each pint of prepared milk, is a good precaution. As the foal grows, the amount of milk fed can be gradually increased, and the intervals between meals lengthened. The second week the feed can be increased to a cupful, given every two hours, or about six or eight times daily. The third week the amount can be

increased to a pint, provided the colt is doing well. If not thriving, be careful about increasing the feed. When a month old, a quart at a feed may be safely given, and four feeds per day is sufficient. At first, a nursing bottle, with a large rubber nipple, will be necessary. Care must be taken to keep this thoroughly scalded, and the nipple scrupulously clean. Cleanliness is half the battle in raising the colt. As soon as it can be accomplished, the colt should be taught to drink from a pail, which should always be kept sweet and clean. It is also important that the feed be at a temperature of from 98 to 100 degrees. Never feed cold milk nor overwarm milk, and do not allow the temperature to vary. Never change and feed the milk from another cow. The colt's digestive organs are very sensitive to changes, and much harm is likely to result, unless great care is taken.

Until the colt's bowels move freely, it is often advisable to give injections of warm water per rectum morning and night. In case the colt has an attack of diarrhea or scouring, from 2 to 4 tablespoonfuls of a mixture of sweet oil and castor oil, thoroughly mixed with milk, is recommended. In this case, cease giving the milk for two or three feeds, giving only sweetened warm water or lime water.