THE

DUMB ANIMALS'

FRIEND.
THE DUMB ANIMALS' FRIEND,

OR,

A GUIDE

In the Care and Treatment of Horses, Cattle, Hogs, Sheep and Poultry, and a compilation of recipes for the cure of their diseases.

by F. E. HUMPHREYS, DALLAS, TEXAS.

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IN PREFACE.

In presenting this work to the public, and particularly to the farming class, the author would say that the observations and recipes are nearly all taken from the contributions to the best Stock Journals, and from the highest medical authorities of the country, and are the results of years of observation and study.

The author was for many years in the drug business, and daily, often hourly, had occasion to put up or compound remedies for man and beast. He therefore knows these remedies to be good for the diseases recommended. No farmer, in fact, no man, with only so much as a cow and chickens, should be without the information here obtained and preserved in book form.

The book is provided with a pretty full index, still you should read it all through so as to know its general scope; there are many recommendations not indexed.

Many of the recipes are simple and you may simply buy the articles and prepare them yourself. But on the other hand many must be put up by the druggist of experience. Many of the recipes, those for external diseases in particular, contain very poisonous drugs; they should be labeled carefully and kept in a safe place.

Of the real value of this book you will learn only by experience. Very high prices have in many instances been paid for a single one of these recipes. Here you get them all and much other valuable information for a reasonable price.

Lastly, I am a friend to all dumb animals. Therefore I have tried to impress on you the necessity of care and kindness. If, by following these directions you save the trouble and expense of the medicines, it will be better for the animal and yourself.

The man who is cross and brutal, careless and neglectful of his stock is apt to be so to his family and others. He will never succeed. Cultivate kindness, therefore, and your reward will be greater than money alone.

THE AUTHOR.
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HORSES.

Just a few remarks on their disposition: 1st.—The horse is naturally gentle, docile, teachable, proud, timid and obedient. He has memory and a knowledge of the character of men. These qualities vary in different breeds, but they predominate, and the horse handled gently and cared for properly from his birth will show them all.

I have said the horse *naturally* has the above good qualities, but you may so handle and educate him that he will show many bad qualities. "A balky man makes a balky horse." A bad driver will make a bad horse. If you would have your horse kind and gentle be *uniformly* kind and gentle to him. Never let a man curse and scream at your horse or jerk the lines or bit. Turn off a hand that won't show good judgment in the care and management of your horses. Don't let impatient or bad boys handle them. Study the horse and make his training and care next only to that of the human family, and you will have a noble and useful animal.

In the recipes following I have given none for "String-halt," "Roaring," "Whistling," "Thumps" and some other diseases which are incurable. You must not *ever* drive, *ever* heat, *ever* feed horses, check them up too high, or give them musty, bad feed, and you will avoid these disagreeable things. If you founder a horse it is your own fault. If you neglect your horse *his appearance will bear witness against you.*

In the compilation of the pages following, I have drawn largely from Dr. Chase, just as he did from others. Many of these recipes were used long before he compiled them. I have also drawn from other sources that I knew to be good. Many are my own, though of course they differ little from what anyone who has studied the subject would write.

How to Choose or Buy a Horse.

The following simple rules will be found useful to all parties about to buy a horse:

1. "Never take the seller's word; if dishonest, he will be sure to cheat you; if disposed to be fair, he may have been the dupe of another, and will deceive you through representations which cannot be relied upon.

2. If you trust to a horse's mouth for his age, observe well the rules given below for that purpose.

3. Never buy a horse while in motion; watch him while he stands at rest, and you will discover his weak points. If sound he will stand squarely on his limbs without moving any of them, the feet planted flat on the ground, with legs plump and naturally poised. If one foot is thrown forward with the toe pointing to the ground and the heel raised, or if the foot is lifted from the ground and the weight taken from it, disease of the navicular bone may be suspected, or at least, tenderness, which is precursor of disease. If the foot is thrown out, the toe raised and the heel brought down, the horse has suffered from laminitis, founder or fever of the feet, or the back sinews have been sprained and he is of little future value. When the feet are all drawn together beneath the horse, if there has been no disease there is a misplacement of the limbs, at least, and a weak disposition of the muscles. If the horse stands with his feet
spread out or straddles with the hind legs, there is weakness of the loins, and the kidneys are disordered.

4. Never buy a horse with a bluish or milkish cast in the eyes. They indicate a constitutional tendency to ophthalmia (soreness or weak eyes), moon blindness, etc.

5. Never have anything to do with a horse which keeps his ears thrown back; it is an invariable indication of bad temper.

6. If a horse's hind legs are scarred the fact denotes that he is a kicker.

7. If the knees are blemished the horse is apt to stumble.

8. When the skin is harsh and rough, and does not move easily and smoothly to the touch, the horse is a heavy eater and his digestion is bad.

9. Avoid a horse whose respiratory organs are at all impaired. If the ear is placed at the side of the heart, and a wheezing sound is heard, it is an indication of trouble. Let him go."

How to Judge the Age of a Horse.

The following concise rules are from "Kendall's Treatise on the Horse," and are generally correct.

1. Eight to fourteen days after birth the first middle nippers of the set of milk teeth are cut; four to six weeks afterward, the pair next to them, and finally, after six or eight months, the last. All these milk teeth have a well defined body, neck and shoulder fang, and on their front surface grooves or furrows, which disappear from the middle nippers at the end of one year; from the next pair in two years, and from the incisive teeth (cutters) in three years.

2. At the age of two the nippers become loose and fall out. In their places appear two permanent teeth with deep, back cavities and full, sharp edges. At the age of three the next pair fall out. At four years old the corner teeth fall out. At five years old the horse has his permanent set of teeth.

3. The teeth grow in length as the horse advances in years, but at the same time his teeth are worn away by use, about one-twelfth of an inch every year, so that the back cavities of the nippers below disappear in the sixth year; those of the next pair in the seventh year, and those of the corner teeth in the eighth year; also the outer corner teeth of the upper and lower jaws just meet at eight years of age. At nine years old, cups leave the two center nippers above, and each of the two upper corner teeth have a little sharp protrusion at the extreme outer corner. At the age of ten the cups disappear from the adjoining teeth; at the age of eleven the cups disappear from the corner teeth above, and are only indicated by brownish spots.

4. The oval form becomes broader and changes, from the twelfth to the sixteenth year, more and more into a triangular form, and teeth lose, finally, with the twentieth year, all regularity. There is nothing remaining in the teeth that can afterward clearly show the age of the horse or justify the most experienced examiner in giving a positive opinion.

5. The tusks or canine teeth, conical in shape, with a sharp point and curved, are cut between the third and fourth year, their points become more and more rounded until the ninth year, and after that more and more dull in the course of years, and lose, finally, all regular shape. Mares have frequently no tusks, or only faintly indicated.
How to Deliver a Ball. (Horse Pill.)

Draw the horse’s tongue gently to the right, hold it with your left hand, raise his head, put the ball on the roots of the tongue with the right hand, then let the head down a little. Don’t rub the gullet. Give the horse a swallow of water or a little hay and the ball will go down.

Big Jaw in Horses and Cattle and its Remedy.

The Live Stock Journal speaks of this disease as follows: "This is more properly called ‘dilation of the jaw bones.’ In horses it is sometimes called ‘big head;’ it is a bony tumor, in which the interior of the bone is absorbed, sometimes leaving a mere shell of bone divided into cells containing purulent or thick matter. This is supposed to be caused by a deficiency of phosphate of lime in food, rendering the bones deficient in this most important element, and the following prescription is often given with good results:

No. 1, Phosphate Powder.

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<td>Phosphate of Lime</td>
<td>6 ozs.</td>
<td></td>
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<tr>
<td>Powdered Golden Seal</td>
<td>2 ozs.</td>
<td></td>
</tr>
<tr>
<td>Powdered Sassafras</td>
<td>3 ozs.</td>
<td></td>
</tr>
<tr>
<td>Powdered Ginger</td>
<td>2 ozs.</td>
<td></td>
</tr>
<tr>
<td>Oatmeal</td>
<td>1 ozs.</td>
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Mix. This will be divided into 4 parts, one given in the food every night.

"This will have a tendency to restore the missing elements in the bone. And the general diet should be food rich in phosphates. You may get your phosphate of lime by boiling beef bones in lye of wood ashes, and after it is reduced fine, wash with water and give a small quantity daily in food. The first thing to do surgically is to open it and let out any matter that it contains. Having removed the matter, inject the cavity with weak pyroligneous acid or weak carbolic acid. This will cleanse it and render healing possible."

REMARKS.—I should prefer the pyroligneous acid to the carbolic, and one part of the acid to three of soft water would be weak enough to use at first; and afterwards one to two or even equal parts, to speed its healing. Both of these acids are disinfectants, i. e., remove bad smells, as well as cleanse and heal, when used of proper strengths as above.

Big Head in a Colt, and the Remedy.

"L. P. J.," of Benzonia, Benzie County, Michigan, May 27th, 1880, wrote to the Post and Tribune, of Detroit, as to the condition of his colt, as follows:

"What ails the colt? In December I discovered a small lump or bunch coming on the left side of the face of my colt, half way between the eye and the nostril. This grew larger until about the size of a man’s fist. I then opened it with a knife. I had been using Centaur liniment and iodine and it had softened a little. I had also used beef brine. Almost immediately another bunch began to grow below this or back of it, and now the side of the face is badly swollen and the colt is falling away in flesh. He is three years old this spring."
To this their veterinarian, H. W. Doney, of Jackson, who had this department in charge, made the following answer:

"Big head. The disease is located on a line between the eye and the nostril. Its first appearance is a small lump on the side of the head, which continues to enlarge until the whole side of the face becomes swollen. It is on both sides sometimes. If your colt is very valuable it will pay you to try a cure, if not get what you can for it and do not bother with it.

**Remedy No. 1.**

Take white arsenic the size of a common field pea, or 6 or 8 grs.; wrap it in fine paper as close as possible, make an incision in the skin over the hard tumor, insert the arsenic or the paper containing it; take one stitch, tie the ends in a hard knot, bleed the horse and turn him out. In a short time the horse will swell, and this will continue until the effects of the arsenic will be seen. A circular piece of skin and the porous bone will drop out, leaving a healthy sore, which may be healed by an ointment made of elder and bittersweet fried in lard, with 1 oz. of turpentine."

**Remarks.**—A good-sized handful of each of these herbs to ½ pound of lard, and 1 oz. of turpentine put in when taken from the fire, would be about the right proportion, and it will make a very healing ointment for any sore whatever. I now leave everyone to adopt the plan of treatment in their stock, horses or cattle, here given, according to their condition, each judging for himself which plan or medicines will be the best to meet their respective cases, being careful to look well to the general health in every case. In connection with the arsenic treatment given in this recipe, I should also use the Phosphate Powder, in the next above, as it is both alterative and tonic.

**Bots in Horses. A New Remedy Worth Its Weight in Gold.**

The Department of Agriculture publishes the following experiments, which a gentleman from Georgia tried and found effective in dispelling this serious trouble in horses. He says: "About thirty years ago a friend lost, by bots, a very fine horse. He took from the stomach of the dead horse about a gill of bots and brought them to my office to experiment upon. He made preparations of every remedy he heard of, and put some of them into each. Most of them had no effect; a few affected them slightly; but sage tea more than everything else; that killed them in fifteen hours.

He concluded that he would kill them by putting them in nitric acid, but it had no more effect on them than water; the third day they were as lively as when put in. A bunch of tansy was growing by my office. He took a handful of that, bruised it, added a little water, squeezed out the juice and put some bots into it. They were dead in one minute! Since then I have had it given to every horse affected. I have never known it to fail of giving entire relief. My friend had another horse affected with bots cured by this remedy.—*George Visitor*, Springfield, O., Nov. 1875.

**Remarks.**—I have had no opportunity of testing this, but I give it, believing it reliable. Is it not possible that it was because tansy would kill worms, that tansy bitters were once so common and popular? I believe it was.
No. 1. For Bots.

Drenching a horse with sweetened milk, following it, half hour later, with strong sage tea, then working it off with currier’s oil, has been heretofore considered the best known remedy for bots, but it is probable that a strong tea of tansy may be found a much better remedy than the sage, used similarly. I pint each, in the order named, a half hour apart, only.

Tansy Tea for Bots.

There is undoubtedly more in the virtues of tansy for bots than appears upon the face of it; for the following item has been more recently going the rounds of the papers: “Tansy tea is said to be a sure remedy for bots in horses. Experiments tried upon bots show that while they resist the action of almost every other substance, they are quickly killed by tansy. It is an easy matter to test it, by those who keep horses, when some of the bots have been passed, by putting them into some of the extracted juice of the tansy leaves.

Bots—Their Manner of Production and How to Avoid Them.

It will not be amiss to state here that bots do not, as many suppose, breed in the stomach of the horse, but simply grow there from the egg which is deposited on the flanks and legs by the bot-fly in their season, which is from July to October, during which time if an oiled rag is kept in the stables and used upon the legs and sides of horses as regular as they are fed, with much rubbing, also with straw, which takes the nits off better than a brush; these nits or eggs will be mostly rubbed off, and consequently the horse will get but few, if any, in his mouth by licking or biting these parts, to be swallowed in the stomach. It is fully grown by spring, at which time, also, they begin to let go their hold on the stomach. They hang to the stomach by little hooks upon their feet, and are carried on by the food passed off; and again develop, as the butterfly is produced from a grub, as it were, another gad-fly, and so on from year to year.

Be careful, then to use the oiled rag freely, and scrape off, if need be, as many as possible of these nits, or bot seeds, every day, as they are deposited, and you will have but little trouble with, and in fact bots never make trouble, except there be indigestion or other disease, which first disturbs them.

During the fly season, also, if not at all times, the hair on the back part of the legs should be closely trimmed, as the rubbing off is easier upon short hair than that which is long and loose; and the shorter the hair the less deposits upon it can be made.

Colic, or Bots, in Horses—How to Cure. No. 1, for Colic.

A friend of mine near Ann Arbor, makes the following his dependence. He says: Steep 1 dozen good sized red peppers in 1 quart of water; strain and give the whole, while warm. Work off in an hour with 1 pint of Curriers’ oil.

Remarks.—He said of this recipe: It can be depended on—neither colic nor bots can stand before it, and it will not hurt horses nor cattle either. This gentleman assured me he had used it, and knew its exceeding value, but did not wish to have his name connected with it, contrary to the desire of most people. I have every confidence in it, for I knew him well, being a very quiet and diffident, or bashful man; and hence
I promised him not to publish his name. Red or cayene pepper is the purest stimulant we have, and hence I have not a doubt it will do as he assured me it would, as it will warm up the stomach to do its work, and prevent the further accumulation of gas, or wind, from the indigestion, and thus cure colic and give bots a legal notice to vacate the premises.

Colic in Horses—Its Cause and What is Needed to Cure It.

As colic is caused by the indigestion of food, a sour or gaseous stomach, as we say of persons, all that is needed to cure it is something to correct the acidity and to warm up the stomach, so that the digestion can proceed again: but as the indigestion and consequent acidity may have progressed so far it cannot be corrected, making it necessary to give an active cathartic to hasten the fermenting food out of the system, it is well at first to give a tablespoonful of saleratus, dissolved in warm water, ¼ pint; then, if you are where the pepper tea can be steeped at once, give it; but 'tis well to have something of an anodyne nature to help allay the pain, as well as to stimulate, which can be kept in the stable, always ready for use, like the following:

No. 2. For Colic.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laudanum</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Sulphuric Ether</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Chloroform</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Tincture of Cayenne Pepper</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Essence of Peppermint</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Tinct. of Belladonna</td>
<td>¼ oz.</td>
</tr>
<tr>
<td>Mix</td>
<td></td>
</tr>
</tbody>
</table>

Dose—For a full size horse, give 1 tablespoonful in warm water, ¼ pint, and repeat in 30 minutes, if not before relieved; or, put the pepper to steeping at once on giving the first dose of this, and if not relieved in 30 minutes give the pepper tea, as in No. 1 above, instead of repeating this, would be preferable. But, if no peppers are at hand, repeat this as above without fear of injury. For I know that a dozen drops of chloroform in a tablespoonful of water has relieved gaseous dyspepsia of persons, while this mixture has several other things in it making it more reliable in colic of horses, and would be good for persons in doses of ¼ teaspoonful, repeated once or twice only, if not relieved in the half hour.

No. 3.

In the meantime, if there is great distention of the bowels by gas, which is almost always the case in colic, do not overlook the importance of giving the tablespoonful of saleratus dissolved in water, ¼ pint, to stop the fermentation of the food, which causes this gaseous condition; and also to have got ready a physic containing ¼ to ½ oz. of aloe dissolved in ¼ pint of water, in which you have put another tablespoonful of saleratus to make it dissolve, so it shall be quicker in its operation to carry off this fermenting food.

Recipe No. 4. for Colic.

If very great pain still exists, or does exist at any time, even as much as 2 ozs. of laudanum has been given, so also has 2 ozs. of ess. of peppermint, or 1 oz. of sulphuric ether, or ¼ oz. of chloroform, or ¼ oz. of harts horn, in ¼ pint of warm water, has and may be given: the laudanum to stop the pain, the others more to stop the fermentation and consequent distention of the stomach and bowels by the gas. Sometimes this gas
is aided to pass off by the rectum by giving warm water injections, turning the horse’s head down hill and pumping in freely all the bowels will retain, even if it is a bucketful will do no harm, but by its wetting and softening influence aids the escape of gas and also the quicker action of the physic, if one has been given. If the gas is once started freely by the rectum consider your horse safe.

But, lastly, in no case allow the cruel custom of taking the horse out and running him, nor even trotting him, nor “rub his belly with a chestnut rail,” nor the wicked and cruel system of laying him on his side and getting a big, heavy man with coarse boots to walk back and forth upon him. Some of the mixtures to relieve pain and stop the accumulation of the gas, then physic, and injections if needed, to start off the gas, must be the main dependence. And, I will only add, if you now allow your horses to die with colic, it is not the author’s fault, but will be chargeable to yourselves by neglecting to have a supply on hand of what is liable to be needed any day. See inflammation of the bowels.

**Corns, or Shoe Boil of Horses’ Feet; Explanation of and Remedy.**

Corns, also called shoe boils, are generally the result of bad shoeing, i.e., allowing the heel of the shoe to rest too far in, upon the sole of the horse’s foot. They should have their bearing upon the shell, or solid, outer part of the hoof; then there will be but few corns. But when they exist, the soft and diseased part of the sole must be cut away to allow the application of the following remedy:

- Sulphuric acid... 1 oz.
- Nitro-muriatic acid... \( \frac{3}{4} \) oz.
- Corrosive sublimate... 1 dr.

**Directions.**—Add, little by little, one of the acids to the other, in an earthen bowl, in the open air, to avoid breathing the fumes arising from them in mixing. Mash the corrosive sublimate finely and add it to the acids. Then, having pared and trimmed down to the sore, apply the remedy with a swab or pledget of lint and bind on till the corrosion or destruction of the hoof is stopped: then apply a soft healing ointment.

**Remarks.**—This is from my old friend Wallington, a farrier of long practice, which ought to be an assurance of its value; but knowing the nature of the preparation, I can assure anyone it will be found just the thing desired. Do not get either of the acids on hands or clothing.

**Condition Powders—Tonic and Purifying to the Blood—No. 1.**

- Sulphur
- Gentian root
- Sassafras (bark of the root)
- Elecampane root
- Ginger root
- Salt peter
- Rosin
- Digitalis leaves

<table>
<thead>
<tr>
<th>6 ozs.</th>
<th>2 ozs.</th>
<th>2 ozs.</th>
<th>2 ozs.</th>
<th>2 ozs.</th>
<th>2 ozs.</th>
<th>2 ozs.</th>
<th>1 oz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buchu leaves</td>
<td>Blood root</td>
<td>Skunk Cabbage root</td>
<td>Cream of Tartar</td>
<td>Epsom Salts</td>
<td>Black Antimony</td>
<td>Fenugreek seed</td>
<td>Rust or Carbonate of Iron</td>
</tr>
</tbody>
</table>

**Directions.**—Pulverize finely, mix thoroughly, and keep in air-tight boxes.

**Dose.**—Give 1 tablespoonful in feed as directed in Remarks.

**Remarks.**—In spring and fall use with all stock, as well as horses, one tablespoonful daily, in a bran-mash, until you can see its beneficial action, or for two
weeks; but in case of a horse, cow or ox, being in bad health, at any time of year, the same dose twice daily, in a bran-mash, may be given for a couple of weeks, or until the desired result—good health—is obtained. Some horses will not, however, eat bran mashes; then stir it in wetted oats. This is especially valuable in all the chronic diseases, as mange, distemper, grease-heel, big-head, big-leg, poll evil, fistula, yellow water, etc. It will show its beneficial effects very quickly.

**Condition Powder—Relaxing—for use in Scratches, Grease-Heel, Etc.**

The following was published in the *Post and Tribune* by H. W. Doney, of Jackson, Mich., in answer to an inquiry of "J. W.," of Paw Paw, for a condition powder to cleanse the blood, in spring, adding: "I have got one horse that has had scratches most of the time for three years, and I have doctored her most of the time."

Mr. Doney, in answering, says: "You have a number of them already given, but here is one for the special purpose:

**No. 2.**

<table>
<thead>
<tr>
<th>Mandrake</th>
<th>2 ozs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloe</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Epsom Salts</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Gentian</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Blood root</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Skunk Cabbage</td>
<td>.2 ozs.</td>
</tr>
<tr>
<td>Gum Myrrh</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Golden Seal</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Stillingia</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Sulphur</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Licorice root</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Ginger root</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Coriander seeds</td>
<td>.3 ozs.</td>
</tr>
<tr>
<td>Camphor gum</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Copperas</td>
<td>.1 oz.</td>
</tr>
</tbody>
</table>

Powder and mix thoroughly. *Dose.*—One-half ounce (about one tablespoonful) once a day, in feed or drench. To aid the operation and produce better results, give one pint of sassafras tea daily. If fever is present give 15 drops of aconite (tinct. or fl. ex.) once a day. If paralysis in any form exists, give 15 drops of belladonna (tinct. or fl. ex.) once a day; or if nerve power is lacking, give 15 drops nux vomica (tinct. or fl. ex.) once a day." These last medicines are poisonous if used too much or too often; so follow directions very carefully.

**Physic or Purge-. For use in Scratches or Grease-Heels.**

Give a good purge made of fluid extract of

| Aloe              | 1 oz.  |
| Mandrake          | .2 dr. |
| Blood root        | .2 dr. |
| Licorice          | 1 oz.  |
| Epsom Salts       | 2 ozs. |
| Water             | .6 ozs.|

Give until the bowels respond freely; then lessen the dose.
Wash for Scratches and Grease-Heel.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Vitriol</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Alum</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Gum Catechu</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Oak Bark solution</td>
<td>1 qt.</td>
</tr>
<tr>
<td>Turpentine</td>
<td>.1 oz.</td>
</tr>
</tbody>
</table>

Mix and use as a wash twice a day. Take the water in which you boil potatoes, 1 qt. Wash the limb with it before using the other. If it will not cleanse the limb thoroughly use oat meal and soap. Rub until the sore looks like a bright pink, and the surrounding portions of the leg white. Keep the stable well cleaned. Use a brush on the leg often.

Condition Powder for a Stallion.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Rosin</td>
<td>4 ozs.</td>
</tr>
<tr>
<td>Madder</td>
<td>4 ozs.</td>
</tr>
<tr>
<td>Black Antimony</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Gentian root</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Fenugreek seed</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Sulphur</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Ginger root</td>
<td>3 ozs.</td>
</tr>
<tr>
<td>Anise seed</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Spanish flies</td>
<td>1 oz.</td>
</tr>
</tbody>
</table>

All made very fine and intimately mixed. 

_Dose._—A tablespoonful a little rounding, in the morning's feed, as he begins to drag toward the last of the season. This is from Robt. Hudson, Winfield, Kansas. No one need fear to use it. And without the Spanish flies, it is a good alterative and tonic powder for any other horse.

Cooling Eye Water for Big Head, Swellings, Sprains, Etc.

Take a quart bottle and put into it pulverized purified nitre, ¼ lb., and soft water, ½ pt., and shake till dissolved; then fill with more soft water and cork for use. For the eye, dilute a little of this mixture with three times as much water, and wash the eyes two or three times daily. For swellings, sprains, etc., apply it as often, full strength.

Distemper in Colts—Treatment.

Distemper in a colt has about three weeks to run its course; all the medicine required is a light dose of Epsom salts, say 4 to 6 ozs., and a good nursing. Give warm bran mashes, linseed or oatmeal gruel; keep the animal warm and rub the legs with cloths dipped in hot water; a tablespoonful of mustard in the water would be beneficial if the legs seem to be weak and numb, or cold. _N. Y. Times._

_Eye Water._

For weak eyes, shown by their watering more or less, freely apply the following:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetate of lead</td>
<td>¼ oz.</td>
</tr>
<tr>
<td>Sulphate of zinc</td>
<td>¼ oz.</td>
</tr>
<tr>
<td>Laudanum</td>
<td>¼ oz.</td>
</tr>
<tr>
<td>Soft water</td>
<td>1 pint.</td>
</tr>
</tbody>
</table>

If the eye is very weak, reduce some of this with an equal amount of water, and apply as the mixture above. A teaspoonful of this put into a 1 ounce vial and filled
with soft water, will be an excellent remedy for sore or weak eyes of persons. Either of these are as good for cattle as for horses.

**Epizootic—The Most Successful Treatment.**

Wm. Horne, a veterinary, in the Country Gentlemen, says: "In the treatment of the epizootic, in 1872, no treatment in my own practice was so effectual, and none brought speedier or more permanent relief than a powerful stimulant applied to the throat outside: and tincture of lobelia, 1 ounce; gelsemium, ¼ ounce. Mix and place 30 to 40 drops on the roots of the tongue, three times a day. Plenty of pure air and general warmth and comfort, make good nursing; not too much pampering and medication.

Remarks. The Sweeney Cure, which is a powerful liniment, and without the alcohol, will be as powerful stimulant as anyone will need in these cases. It is not necessary to blister; however, if it is likely to do that, rub over with sweet oil to prevent the blistering. Or, if made without the cantharides, it will not blister. The lobelia helps the cough, and the gelsemium keeps down the fever by lessening the pulse. This is claimed to be a bad disease; then use the condition powder No. 1 in connection with the other treatment.

**Galled Shoulders and Saddle Galls—To Prevent and Cure.**

To prevent shoulder galls for horses easily galled, have a collar shield of firm, smooth-faced leather, upon which the collar will move or slip easily, and thus not abrade or chafe the surface hair, skin, etc.; and have the saddle lined with hard, smooth-surfaced leather—rawhide is best—like the military saddle, but never have one lined with any woolen stuff.

*To Cure.*—Wash with soap suds, and apply the following solution:

- Copperas
- Blue Vitriol
- Water

1 drachm.

¼ drachm.

1 pint.

which will reduce inflammation, harden the surface, and aid the growth of new skin, if broken. Never put on the saddle nor harness while the place is wet from the application.

*Gross Hul*—(See Scratches, etc.)

**Heaves or ‘Windbroken’—Necessary Caution in Feeding, and Cure for Many.**

"Heaves and windbroken are one and the same disease, the first being used to designate its mildest form; and the latter, when it reaches its severest stages. It is in reality a kind of asthma caused by overfeeding on clover, hay, chaff, and other coarse, bulky and dusty fodder. The disease is seldom known where horses are pastured all the year, and clover in some of its species does not enter into the hay crop. If the horse has not had the heaves so long as to be wholly beyond help, try feeding on corn-stalks, cut moist; hay, with carrots, beets, turnips, potatoes, and other well known nutritious roots. Keep the bowels open by laxative remedies, and for a tonic give arsenic in 5 grain doses for two or three weeks. Give the animal no dry hay, except a little handful at night; and if you have good, well cured corn stalks, these will suffice, with plenty of roots and cut hay (wet), with grain three times a day." — *New York Sun.*
Remarks.—There are some veterinarians who claim that the air cells, or some of them, are ruptured; when this is actually the case, there is probably no cure; but before this has occurred, it has been claimed by H. Few, a French veterinarian, I think, that 15 grains of arsenic, daily, for two or three weeks, as McClure and Harvey, in their work on the horse, informs us, “with green food or straw, and in some cases bleeding, was perfectly successful,” in ten reported cases. In one it returned after three months, which “speedily yielded to a repetition of the same treatment.” The way to give it would be to sprinkle it in fine powder on a few thoroughly chopped roots, 5 grains, morning, noon and night. There would be no danger in its use, stopping at the end of two or three weeks, or when the difficulty has been fully overcome.

Inflammation of the Bladder—Cause, Symptoms and Treatment.

Cause.—A correspondent of the Blade, of Watertown, N. Y., says: “It is often caused by the abuse of diuretics; and the frequent use of rosin, with the idea that it loosens the skin and improves the appetite, too often results in this trouble.

Symptoms.—“The symptoms are the passage of the urine in small quantities, and frequently with evident pain. The animal turns and looks at the flank; the hind legs are restless, and the tail is switched about violently, but chiefly downward. The horse moves stiffly, and with a straddling gait of the hind legs.

Treatment.—“No diuretics should be given, but soft mucilaginous food, such as linseed (flaxseed) and oats boiled (½ pint to 1 pint would be enough to boil in a feed of oats), and given with cut hay and slippery elm bark tea. This will relieve the organ better than medicines. After the inflammation has subsided and the symptoms have been relieved, 1 drachm of chlorate of potash may be given daily for two weeks in the food, which should be continued as before for a few days.”

Remarks.—The author would prefer the use of acetate of potash rather than the chlorate, in like amount. The chlorate can be powdered and put in the feed; 1 ounce of acetate would have to be put in a bottle with 8 tablespoonsful of water, as it softens very quickly in the air; then 1 tablespoonful contains 1 drachm, which is a dose. Put it in the food or drink, as you choose.

LINIMENTS, SALVES, OILS, ETC., FOR HORSES.

Liniment No. 1.

By permission of W. M. C. Hill, Esq., postmaster of Dallas, Texas, owner of the great stallion which sired “Lena Hill,” 2-year’s record of 2:12½, and “Judge Hurt,” 1-year’s record of 2:37½; also owner of Hill’s Stock Farm, Grand Prairie, Texas, who says he keeps it by the gallon at the farm, and always at his home; that it is as good for man as for animals, and cures sprains, swellings, stiffness of joints and old sores, wounds and bruises. I publish this recipe: Take of

Apple Vinegar 1 pint. Spirits Turpentine 1 pint.
Spirits Ammonia 1 pint. Whites of 4 Eggs.
Chloroform 1 oz.

(Leave out the Chloroform when you wish to use on fresh cuts and wounds.)

Mix and bottle tight. Apply by rubbing. This is the first time Mr. Hill has given this receipt for publication, as it was given him years ago by an old friend for personal use, but that friend is now dead, so Mr. Hill kindly gives it for your benefit.
California Liniment. No. 2.

Opodeldoc  
Spirits of Turpentine  
Oil of Origanum  
Black Oil  
Best alcohol  
Gum camphor  
Red pepper  
Aqua ammonia

Good in all acute pain, rheumatism, sprains, and swellings in man or beast.

Remarks.—This, with the black oil, white oil, gargling oil, and the green salve following, and the condition powders for stallions, were obtained from the diary of Robt. Hudson, of Winfield, Kansas, who had spent considerable time in California, where he obtained them from practical horsemen; and from my own knowledge of the nature of the articles used, I am free to say one will search a long time to find others equal to them.

New York Sun’s Liniment. No. 3.

The New York Sun says: "Of liniments there are as many different compounds as of condition powders, but a good one for horses and other animals may be made of

Oil of spike  
Origanum  
Wormwood  
Spirits of ammonia  
Spirits of turpentine  
Sweet oil  
Best alcohol

Mixed and kept in a bottle, corked when not in use."

Remarks.—It is a good one for general purposes. See, also, "Sweeney Cure," which is a liniment.

Black Oil. No. 4.

British oil  
Oil of spike (balsam of fir)  
Tanner’s oil  
Tamarack balsam  
Oil of vitriol  
Spirits of turpentine

Mix in the order named, putting in the oil of vitriol slowly, and when cool the spirits of turpentine. Better be in a quart bottle. Very healing, and to reduce inflammations by rubbing in or laying on with wet cloths or soft paper on either man or animals.

White Oil, English. No. 5.

Spirits of turpentine  
Alcohol  
Olive oil  
Hartshorn  
Camphor Gum

Mix. Used especially in wounds and upon old sores.
Gargling Oil. No. 6.

White wine vinegar (good cider vinegar will do) 1 pint.
Spirits of turpentine 1 pint.
Sweet oil 1 pint.
Oil of vitriol 1 oz.
Castile soap 2 ozs.
Saltpeter 2 ozs.

Directions.—Shave the soap fine, add the oil of vitriol slowly, pulverize the saltpeter and shake occasionally till dissolved, when it is ready to use upon swellings, wounds, frostbites, etc., on horses and cattle, and it has been used extensively on persons.

Opodeldoc. No. 7.

Take: White soap 3 ozs.
Camphor gum 1 oz.
Oil of rosemary 1 drachm.
Oil of origanum 1 drachm.
Alcohol 1 pint.

Dissolve the soap in the alcohol by a gentle heat, then add the gum camphor and the oils, and when all dissolved pour the mixture into wide mouthed bottles. Useful for sprains, rheumatism and bruises. Good for man and beast. Often used in other recipes. Use white Castile soap.

Green Salve. No. 8.

Spirits of Turpentine 4 ozs.
Beeswax 2 ozs.
Rosin 2 ozs.
Honey 2 ozs.
Lard 12 ozs.
Finely pulverized verdigris 1 oz.

Directions.—Heat all gently together, except the verdigris, then remove from the fire and stir that in as it begins to cool, and stir till cold. Put in tin boxes for use.

Canker in the Foot.

This disease is always preceded by thrush. It is fungoid growth of the frog, and bleeds upon the slightest cause.

Treatment.—Remove with sharp knife all loose horn, and trim away part of the growth. Then wash once a day with: An ounce of nitrate of silver well shaken in a quart of rain water. Give nutritious food and good care.

Catarrh or Common Cold.

Medicines are of little use. Good nursing and careful management are required. If there is a bad cough give green food, turnips, rutabagas, apples, etc.

Distemper.

Follow rules for catarrh. If he won’t eat keep drink away and give warm mashes, and hay slightly wet and salted. Feed scraped carrots. Keep up his strength till disease runs its course.

Cause.—Dusty or musty hay.

Cure.—Change the hay. If you can’t then cut it fine and feed it wet, to which add a spoonful of ginger every day till cured.
Inflammation of the Bowels

Can be told from colic of the pulse. In colic it is about natural, say 50 beats to the minute. The animal often rolls, and there is not much fever. In inflammation there is much fever; pulse sometimes rises to nearly 100 to the minute. The attack is gradual and the disease does not intermit. In this case the horse is often killed by the irritating medicines given.

Cure.—Give the horse a drink of slippery elm tea every hour to allay inflammation—keep him quiet. Never bleed him. Let him have little to eat, say gruel made of ground oats sifted, bran, and a very little corn meal, with a little salt added.

Cracked Heels or Sandcracks

Occurs in hoofs hard and brittle, and usually in the "quarter." Take off the shoe, clean the foot carefully and apply a solution of chloride of zinc—six grains in a wine glass of water. Soak and wash often with soap and water.

Cribbing.

The habit of pressing the teeth and biting or gnawing everything the horse can reach. Dr. Tuttle of Clinton, Mich., says this is "belch of wind from the stomach." As to the cause he says it is indigestion or dy-pepsia, fermentation or souring of the food. He claims it generally begins with the colt. The cause of the indigestion he says is mostly by putting the colt too early on dry feed, grain, etc., which it is not able to masticate. His remedy is raising spring colts and when winter comes, if grain is necessary, give boiled oats or oat meal and early cut hay. Shelter well. Always water before feeding. If signs of cribbing appear, that is dy-pepsia, treat as follows and continue till cured: Give 20 drops of tincture of nux vomica, in a swallow of water to a horse that is five years old, 17 or 18 at 1 years old, 15 at 3 years old, 10 at two years old. Give as drench if necessary.

Also give the following condition powders:

Powdered gentian 1 lb.
Best red peruvian bark, ground by the druggist 1 lb.
Jamaica ginger root, best, ground by the druggist ¼ lb.
Mix well. Keep in a tight box. Give a small tablespoonful at each meal.

Curb.

It is recognized by a protuberance back of the hock, about 1 or 5 inches below its upper joint. It makes the hind legs appear crooked and unsightly.

Rub well with California Liniment. (See Index). Some farmers simply rub often with the hand or a corn cob. Let the shoe be low at the toe so as to take the strain from the ligament.

Drenching.

A long necked, smooth bottle is best. Elevate the head a little, but let it down quickly if there is any sign of coughing, for some of the liquid may have gone the wrong way. Never, never drench through the nose.

Founder or Laminitis.

This is indicated by a cat heat in the part and throbbing of the plantar arteries. The horse seems stiff and sore all over and stands with his legs drawn under him, so as, if possible, to take the weight off the fore feet.
TREATMENT.—Apply warm flax seed poultices to the feet. Give an injection of warm soap suds, and administer a purging ball, and follow with a tonic condition powder. If you neglect the disease the animal will never entirely recover.

Glanders and Gleet

Are incurable and very contagious to man and beast. The horse must be killed and buried. Most or all the states have laws enforcing this. You wish to know how to tell the disease: It begins by a swelling of the gland under the lower jaw, there is seldom fever. After a time a discharge of a gluely nature appears from the nose, usually from one nostril. The gland becomes painful, more swollen and appears hard. There is no softening or suppuration. The lining membrane of the nose becomes heightened in color. A very marked symptom appears, which is a hard lump in the center of the jaw. This is hard, adheres to the bone, and is not painful on being touched.

In diseases of the air passage there is often a soft diffused swelling of the gland, but this is very different from the hard tumor of glanders. Again in glanders the absorbent vessels in the surrounding parts become hard and corded. The discharge is first aqueous, then is mixed with ropy mucous, afterwards it becomes glairy and gradually yellow in color. But the one constant sign is that it is gluely and adhesive. It clings to the hair around the nostrils and may even clog them. The disease may come to the horse by inoculation, exposure of being in the yard, stable or company of a diseased horse, and it may come spontaneously. In either case it is incurable and you must destroy the horse and the box he has fed from and thoroughly cleanse the stall and manger he has occupied.

Farcy.

This disease originates from the same cause as glanders, unlike that, however, it may be cured, but it requires time and good care. The symptoms are these: The absorbents and vessels of one or both hind legs are swollen, inflamed, tender, hard and knotted. The vitiated lymph thus poured out softens, and ulcers or farcy buds appear.

TREATMENT.—Scarify these with a hot iron and to prevent spreading draw the iron gently over the surrounding skin. Give twice a day the following:

- Sulphate of copper ........................................... 3 drs.
- Iodine .................................................................. 6 drs.
- Linseed meal ......................................................... 12 ozs.
- Rhubarb, powdered ............................................. 3 ozs.
- Molasses ............................................................... quantity sufficient.

Pulverize the sulphate and iodine, mix with the meal and rhubarb and add the molasses little by little to make the mass of the right consistency. Make into 12 pills or balls and give one at a dose. If it interferes with the appetite hold up a day. Let the feed be good and lodging comfortable.

Lampers or Lampas.

This is an inflammation or swelling of the bars in the roof of the mouth.

TREATMENT.—Cut or scarify the parts affected with a sharp knife or lancet, and then wash with alum water. In severe cases burn with lunar caustic.
Mange in Horses.

Remedy.—Wilke’s Spirit of the Times published the following as a safe and effectual remedy:

- Whale (sperm) oil
- Oil of tar
- Lac-sulphur

Mix thoroughly and apply with a hair brush, first washing the skin carefully, and at the end of the second or third day the animal is to be again washed, and the remedy re-applied, as it is very probable that all the ova (eggs) of the mange (itch) insect are not killed by the first application.

Remarks.—As mange is as contagious with animals as itch is with children, keep them from others; and be careful to purify the stalls, or places where they may rub; and the harness or saddles, or such parts of them as come in contact with the diseased parts of the animal, should be washed with strong soap suds, having 1 part of carbolic acid (liquid) to 6 or 7 of the suds, and carefully dried and aired, and the blanket, if any has been worn, should be boiled in soap suds, with 1 oz. of the carbolic acid, at least, to 1 pail of soap suds; and the curry comb, brush, etc., washed in the same while hot; and afterwards wet with a solution of arsenic or corrosive sublimate, 10 grains to each ounce of water needed, to wet them thoroughly; for it is very difficult to kill all the itch or mange mites which cause the disease. Rub well with sulphur, also, the saddle and inside the harness, before again putting upon the horses. With these cautions you may feel safe. See also the preparation for mange in hogs. It is certain there, why not with horses? I think it would be. If there are any scabs on harness or saddle be careful to first remove them. And I think it advisable not to let the mites upon one’s hands, lest he, too, get the itch. Remember the sublimate is poison, as well as the arsenic, so keep both out of the way of children.

Poll-Evil, Fistula, Fistulous Withers, Etc.

Successful Remedies.—“Poll-evil simply means a disease of the head, as the word “poll” comes from the low Dutch Polle, the head, and as the word evil, in connection with a disease, signifies one causing suffering, we get poll-evil, a disease of the horse’s head from which there is much suffering. As to fistula, it is a Latin word and signifies a hollow seed, or pipe; hence, where we have a hollow pipe running down into a sore, it matters not whether upon the head or the withers (highest part of the shoulders) of a horse, it is really a fistula or a fistulous sore; and, as what will destroy the pipe which runs down into the bone, in one case, will destroy it in the other, we couple them together.”

Prevention. Don’t strike your horse on the head. Don’t keep him in so low a place that he can bump his head. Don’t put on a heavy head-gear with such a band over the top of the head as will bring about or cause a swelling.

Treatment. Give the horse a dose of 10 ozs. of Glauber Salts dissolved in a pint and a half of hot water. As soon as it is cool give to the horse with a drenching bottle. Keep the sore wet with cold water and vinegar, equal parts, poultice with bruised flax seed twice daily until the tumor softens. Then don’t wait for it to break of its own accord, but as soon as the matter can be felt make a slanting cut with a sharp knife
upon the right side of the neck at the base of the abscess. Be careful not to cut so deep as to come in contact with the spinal cord or marrow. A seaton should be passed from the natural opening at the top of the tumor to this opening at the base. Before inserting the seaton, dip or wet it with tincture of cantharides.

Make the pus escape freely as fast as it forms. Re-saturate the seaton in 3 or 4 days with a solution of 10 grains of nitrate of silver in an ounce of cold water. Three times a week inject into the opening from the top down a solution of one drachm of chloride of zinc, to one pint of cold water, but you had best begin a half hour after you first insert the seaton and inject the solution once a day till a healthy granulation sets in; then every other day till healed. If it becomes a running sore, you will find the following recipe from the Germantown Telegraph, very satisfactory, as I have always observed the reliability of its recommendations. It says: "First, clean the sore with warm, soft water, and dry with soft, warm cloths; then drop on 8 or 10 drops of muriatic acid twice daily, till it looks like a fresh wound; after this wash with suds of castile soap, and leave it to heal, which it will speedily do, if enough acid has been used."

Remarks.—If a pipe or pipes have already been formed, be sure to drop a few drops of the acid into each pipe, else it will be sure to break out again if the pipe is not destroyed. Do not touch the acid with the fingers, nor get it upon any place outside of the sore, for if you do, it will make a sore of itself; destroy clothing, etc. An alkali, as a lye made of wood ashes, or sweet oil, would be the antidote, and would need to be used quickly, if got upon the person or clothing. Any of the healing ointments or liniments may be used to heal with, keeping the sore properly covered to avoid dust and dirt getting into it.

A bit of concentrated lye, which is used for soap-making, the size of a bean or pea, wrapped in a couple of thicknesses of tissue paper (white) and pushed to the bottom of the pipe, or each pipe, if there is more, will destroy the life of the pipe, and hence cause it to come out, and give a chance to cure it from the bottom. Keep a piece of cotton saturated with liniment or healing ointment, pushed to the depth of the sore; it causes it to heal from the bottom, otherwise it will break out again. The concentrated lye is better than arsenic or corrosive sublimate, which are poisonous and cause inflammation of the parts, only to kill the unnatural growth. The Jersey Telegraph claimed to have known the successful use of the acid plan for a number of years. The acid on the sore and the lye on the pipes, if there are any, with cathartics and general tonic treatment with some of the condition powders, will cure every case, the author has not a doubt.

Pawing in the Stable—To Cure Horses of the Habit.

Fasten a short piece of log-chain, say five or six links, by means of a light strap to his leg, just above the knee (in the stable of course), so the chain stays on the front of the leg, and see how quick the pawing horse will leave off the habit. In most cases a few days will be sufficient to effect a cure.—New York Weekly.

Pawing—Cure For.

It is said that this annoying habit can be cured in the following manner: Bore a hole on each side of the stall a little in front of where the foreleg stands. Insert a rawhide, wedge tightly in, and allow the ends to reach well out toward the centre of the
When the horse paws he will catch the rawhide with the foot which he paws, and in fetching back the foot the cord of the rawhide hits him on the other foot. A few experiments will convince the horse that pawing with one foot always causes punishment on the other, and soon the annoying habit is cured.

**Ringbone, Spavins, etc.—Certain Remedies.**

Ringbone and spavins, poll-evil and fistulas are the most annoying diseases with which our domestic animals are afflicted; but with careful observation of the recipes the author has gathered during ten years of close scrutiny of everything published in our most reliable journals, we have not a doubt, enable our patrons to not only cure the lameness, but also to remove or cause the absorption of the bony enlargements in most ringbones and spavins, and to also cure the unsightly sores of poll-evil and fistulas. The first recipe I shall give for ringbone is from a correspondent ("J. H. M.," of Wyoming, O.) in *Farm and Fireside,* of Springfield, O., in answer to "S. W. F.," in the same journal, and is a cure for this disease, which, if followed, he says will never fail:

**No. 1.**

- Cantharides, powdered
- Mercurlial ointment
- Spirits of turpentine
- Tincture of iodine
- Corrosive sublimate, powdered
- Mix well with lard

**Directions.**—Cut off the hair from the lump and grease with and rub in well the above preparation. In two days after, grease with fresh lard, and in four days wash off with soap suds. Repeat every four days until the disease disappears. I have cured two cases of ten years standing."

**No. 2.**

- Oil of Origanum
- Tincture of myrrh
- Alcohol
- Corrosive Sublimate
- Iodine (best)

**Directions.**—Dissolve the corrosive sublimate and iodine in the alcohol and add oil and tincture and apply, after cutting off the hair. In two days grease with fresh lard and wash as in No. 1.

**Spavins, Blood or Bag Wind Galls, Thoroughpins, Splints, Etc.—Permanent Cure for.**

- Very strong vinegar
- Aqua fortis (nitric acid)
- Spirits of turpentine
- Best alcohol
- Mix

**Directions.**—Bathe freely, rubbing hard. Rub downward until you cause quite a heat in the leg. It will not cause any blister, and before you realize it, it will disappear. It has been over two years since I cured my mare, referred to below, and she is
as good as ever to-day. Bathe three or four times a day, rubbing hard every time. It seems a very simple recipe, but I can warrant it a good one. B. F. Chamberlin, of Rich, Lapeer county, Mich., in Detroit Post and Tribune, December, 1880. To which he added:

"It effects a permanent cure. I have tested it on my own horse, also on others. I have a mare which had two spavins, one on each hind leg; also two thoroughpins came with them. I tried several kinds of medicine with no effect, until I got this recipe. The spavins (wind galls) were as large as a pint bowl. I considered her almost worthless, she being a very small horse; but I not only cured her lameness, but caused the enlargement to disappear entirely in three weeks. You would not know to-day that she ever had a spavin."

Remarks.—Certainly testimony as large as a pint bowl is all that may be demanded, for I never saw one of these wind galls, or puffy lumps, larger than half a hen's egg, this was an extreme case, and so much the more satisfactory for those who may need to try it, so I give his own words of assurance. A thoroughpin is the same as a leg spavin, or wind gall, as they are also called, except it extends along a tendon up and down the leg, rather than in a lump or puff; treatment the same.

**Splints, Ointment for.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin, iodide of mercury</td>
<td>1 dr.</td>
</tr>
<tr>
<td>Powdered cantharides</td>
<td>2 drs.</td>
</tr>
<tr>
<td>Lard</td>
<td>½ oz.</td>
</tr>
</tbody>
</table>

Mix evenly into an ointment.

**Directions.**—Shear off the hair from the enlargement and rub in the ointment 15 minutes. The third day after apply sweet oil, lard oil or lard, to soften and aid in removing the scab. The horse or colt must not be allowed to get at the sore with his mouth. Continue until cured.

**Sweeney--Liniments, Oils and other Cures for.**

Webster give us no such word; but it is well understood by horsemen, to refer to a shrinkage of the muscles over the shoulder blade of the horse with a tightening down of the skin to the shrunken condition of the muscles. If it was upon a person physicians would say the muscles were atrophied, from lack of nourishment; then what will stimulate them to a healthy action so that they shall receive their proper share of nutrition, will soon cure the difficulty; hence the propriety of using some of the following liniments or oils upon the affected shoulder. And first I will give one from a Kansas stage driver, which he called:

**Sweeney Cure.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil of origanum</td>
<td>4 ozs</td>
</tr>
<tr>
<td>Oil of spike</td>
<td>2 ozs</td>
</tr>
<tr>
<td>Oil of hemlock</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Tincture of cantharides</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Spirits of turpentine</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Camphor gum</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Mix and keep well corked.</td>
<td></td>
</tr>
</tbody>
</table>
Directions.—Rub on well, once daily, lifting the skin well at first. Two or three weeks will cure bad cases. It will blister. But if it gets too severe miss a few applications, or rub over with sweet oil (lard will do) after applying.

Remarks.—This was given by a stage driver, over whose route I passed April 20, 1876, from Wichita (Wichetaw) to Winfield, Kas.

Strangles.

Symptoms.—The horse appears sick and refuses to eat, usually there is fever; in a day or two the glands under the jaw or back of the ear swell, and a tumor forms. As soon as it comes to a head, lance it in the lowest part.

Physic the horse with a half pint of castor oil. In two or three days the horse will be all right, usually.

Sore Throat, or Laryngetis.

Symptoms.—The horse is disinclined to eat, sips his water, mouth is hot, and he swallows with difficulty and has a cough. If you press your hand on the gullet, it feels hot and the pressure makes him cough.

Remedy.—Give soft feed only, grass, carrots, bran mash or linseed gruel, and a little salt to this soft feed. Keep a pail of good fresh water where the horse can reach it at all times. Open the bowels with 2 ozs. epsom salts and ½ oz. of the best tincture or essence of Jamaica Ginger in a pint of water. Give this both in the morning and evening.

If the disease is attended with the strangles, then use warm flax seed poultices or fomentations on the throat. Change them often and keep them hot. Open the swelling as soon as it softens and comes to a head. If there is any irritability pour boiling water on hay and steam the head. Put 1 gill of chloric ether on the hay if you can get it. Keep a blanket on the horse and wrap his legs in flannel.

Horsemens’s Hope Liniment—A Cure for Sweeney—"Californian."

I will give it in his own words:

Ninety-eight per cent. alcohol
Oil of origanum, best quality
Hemlock oil, pure

Add the oils and stand till cut (they will cut, or dissolve, by shaking, immediately); then add the following:

Aqua ammonia, strong
Gum camphor
Castile soap

Shaved and dissolved in a little hot water; then add the whole to the alcohol and it is fit for use. I have cured sweeney’s on three or four occasions with the above, by applying and immediately covering the parts with a heavy woolen blanket.

Remarks.—I do not think Mr. McClane (see ringbones for explanation) intends to be understood that one application would cure, but that to continue its use a reasonable time daily would do it, of which I have not a doubt. Still, I think it a good plan in all cases to lift up the skin, by means of the thumbs and fingers, to break it loose, as it were, from its attachments to the muscles for the first few applications. Some per-
sons, you will see in the next recipe, claim this "lifting up of the skin" and allowing it to fill up with air will cure the disease. I cannot say that it will, but I know the breaking up of the attachment will help the cure by its stimulating the muscles and blood vessels of the shoulder to increase irritation, and thus help the stimulation.

**Sweeney—Simple and Certain Cure For.**

A. W. Baird, of Gibson, Ill., writes to one of the papers in answer to an inquiry for a cure for this disease, saying: "The cure is short, easy, sure and simple. It is this: With the forefinger and thumb of the left hand pull up the skin on the shoulder, pretty well up on the shrunk place; then, with the small blade of a penknife make an incision through one side of the skin that is pulled up. Then with both hands raise up the skin around the incision, and it will fill with air. Fill the shrunk place full; let your horse stand a few days or run on pasture; he will soon be well; it is a certain cure."

**Remarks.**—It strikes me that there would be more certainty of filling with air if a goose quill was passed just through the orifice in the skin and then inflated to its full extent by blowing. I will give one more, the oil, made with angle-worms, taken from *Post* and *Tribune*, and will also remark that angle-worm oil has been considered valuable also for stiff joints, rheumatism, etc. The addition to this will make it so much better than without them. It is as follows:

**Oil for Sweeney.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dig and wash clean angle-worms to make</td>
<td>1 pt.</td>
</tr>
<tr>
<td>Put them in a suitable bottle, adding salt, by weight</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Spirits of turpentine</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Sassafras oil</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Hang in the sun until the worms are dissolved, then strain and add:</td>
<td></td>
</tr>
<tr>
<td>Oil of spike</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Oil of hemlock</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Oil of cedar</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Gum camphor</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Shake and bathe the shoulder night and morning. If it blisters or gives too much pain, rub on a little lard oil (or lard).</td>
<td></td>
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</tbody>
</table>

**Remarks.**—I think this will prove a valuable oil for sweeney, and for the general purposes of a liniment. In the same issue was the following treatment for strains, swelled legs, etc.

**Lotion.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steep wormwood herb</td>
<td>4 ozs., in</td>
</tr>
<tr>
<td>Sharp vinegar</td>
<td>2 qts.; add</td>
</tr>
<tr>
<td>Salt</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>Bathe the limb thoroughly with this, then use the following</td>
<td></td>
</tr>
</tbody>
</table>

**Liniment.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil of spike</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Oil of hemlock</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Oil of cedar</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Camphor gum</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Turpentine</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Sweet oil</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Arnica</td>
<td>1 pt.</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1 pt.</td>
</tr>
<tr>
<td>Shake before applying.</td>
<td></td>
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</tbody>
</table>
Scratches, Grease Heel, etc.—To Avoid and to Cure.

To Avoid.—Keep the horse in good health, and in the wet and muddy season, fall, winter and spring, keep the naturally long hair of the fetlocks, especially of the hind legs, which are much more liable to this disease, cut rather closely, so that by proper grooming these parts soon dry, and thus avoid difficulty. I say this, for as a general thing it begins with slight inflammation of the skin, when it is scratches proper; but which, if allowed to proceed to deeper and more extensive inflammation, causing the cracking of the skin, and the escape of a greasy and purulent, or foul matter, to exude from the cracks, which also excoriates and extends the inflammation to all parts which it touches, when "grease" may be considered to have taken full possession; and if not now met with proper treatment, the exudation assumes a foul smell, and finally a fungous growth may arise in lumps, grape-like, to cover the whole of the diseased parts, leaving a red and angry appearance. Of course this is not common; for proper constitutional treatment, by condition powders, combining cathartics and diuretics, as well as tonics, with some of the following local applications, will prevent or cure this disease. (See condition powders Nos. 1, 2, 3, and also the one given in connection with cribbing.)


"Attend to cleanliness. Apply during two days, two poultices of equal parts of bran, flaxseed meal, and powdered charcoal. Thereafter apply twice daily a portion of oxide of zinc ointment (this is made with oxide of zinc, 1 oz., to benzoated lard, 6 ozs.) previously removing all secretions of matter as well as dry scabs and crusts. (This must be done with warm water and castile soap, washing carefully and drying perfectly.) If, after a week or ten days, the case does not improve satisfactorily, apply instead of the ointment twice or thrice daily a portion of a mixture of 1 oz. of Goulard’s extract, and ¼ oz. of carbonic acid to ½ pt. of water. Give loosening food, among which may be mixed 2 drachms of nitrate of potash, morning and evening, during one week."

Remarks.—This poultice may be considered one of the best that can be made, which I know from personal experience, except the bran, to which I have no particular objections. Although I have never had the scratches proper, yet I had something much worse some 50 years ago. I had a foot mashed in a threshing machine, and mortification set in upon two of the toes, but the young physician was equal to the occasion with a poultice of flaxseed, properly boiled, (as there was no flaxseed meal then kept by druggists), and thickened with powdered charcoal; the mortification was stopped from extending, and the mortified parts separated from the healthy parts, when the tendons only had to be clipped to remove them wholly from the foot; hence no one need to be afraid to tie to this poultice, and the whole treatment will be found good, not forgetting the constitutional or condition powder part of it, in all cases.

Scratches or Grease Heel in Horses—Simple and Cheap Remedy.

The following, which is the last I shall give upon this subject was from one signing himself "A Subscriber," of Hillsdale, Mich., to the Detroit Tribune, in answer to an inquiry of H. E. Lyon, concerning the treatment of scratches; but to which he says: "I will state that I think it a case of grease heel, which is far worse than common
scratches. The remedy prescribed in the *Tribune* is a good one, but I have a simple and cheap remedy. Cleanliness in the stable has much to do in the case, keeping the stable well cleaned and littered with clean, dry straw.

Give the following condition powder:

**No. 1.**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamaica ginger</td>
<td>8 ozs.</td>
</tr>
<tr>
<td>Gentian root</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Niter</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Blood root</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Arnica</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Crude Antimony (black)</td>
<td>⅛ oz.</td>
</tr>
</tbody>
</table>

*Directions.*—All to be finely powdered and thoroughly mixed together, then give one large tablespoonful in bran mash once each day for six days; then omit three days, and again repeat two or three days. This is equally good for any horse that is out of condition, or wants an appetite.

For the Sore Heels.—Cleanse the parts affected thoroughly with castile soap and soft water, and when thoroughly dry, boil turnips (have boiled and mashed already mixed) and mash, and to this add finely pulverized charcoal. Poultice with this for three days, changing the poultice twice each day; then cleanse thoroughly again with castile soap and soft water, and when the parts are thoroughly dry, mix (have already mixed together) tanner’s oil and white lead to the consistency of paint; apply thoroughly with a brush to the affected parts once each day. A few applications will generally suffice. Cleanliness in the case has much to do in effecting a cure. The white lead is of the greatest importance in the case, but works best when incorporated with tanner’s oil. Hoping this may prove beneficial to Mr. Lyon, I submit it to your consideration, if you think proper to publish it.

*Remarks.*—Of course they published it, and it will be found good treatment, although I must say that our condition powders will have a more general action upon all the secretions than "Subscriber’s," but his turnip poultice with the charcoal thickening and the white lead in tanner’s oil, will no doubt prove very satisfactory to all who try them. I have known common white lead paint to act nicely upon galled shoulders, while this, with the tanner’s oil in place of linseed oil, will prove more softening, and, I think, also more healing.

**Surfeit in Horses—Cause and Cure.**

Surfeit is a disease more particularly affecting the skin, in which at first there will be found hard lumps, and if not soon cured, will finally become sore and a sticky matter exude, forming scales or seabs, and the treatment become more difficult. It is believed to arise from the horse having been over-worked or over-driven, by which the blood has become heated; then, by drinking cold water, or standing in the cold, they become chilled, which shows itself in the skin, more particularly because the kidneys fail to depurate the blood, i. e., to take up and carry off the effete or worn out portions of the system, which are, therefore, thrown upon the skin in too great quantities to obtain free escape; and hence, diuretics, such as niter, ½ oz. dissolved in a little water, and given in its drink night and morning, or an ounce daily of sweet spirits of niter in
the same way for a few days, will if taken in hand soon, generally correct the difficulty, but if the horse is not in general good health, a general constitutional treatment, with some of the condition powders, care in his feed and grooming, as well as to see he is not again over-heated, will be necessary. Cathartics, however, are not considered as essential in this disease as diuretics. I do not see that any writer upon this subject directs an application to the skin; but I should most positively recommend the daily, or twice daily, application of a good stimulating liniment to be well rubbed into the diseased parts of the skin, for I know it will expedite the cure as much as an ointment helps to more quickly cure the itch.

Remarks.—Many is the horse that has been spoiled by hitching into a buggy or wagon and being driven quickly to town, then allowed to stand for hours; often I have seen it till eleven o’clock at night, in a cold dreary wind, while the driver “gossipped” and “guzzled” in a warm, comfortable room. If this must be done, for humanity’s sake put the horse in a comfortable stable.

Warts on Horses or other Stock.—To Cure.

A farmer writing to one of the papers says: “I had a mare some years ago that had a large wart on her side, where the harness rubbed and kept it sore. In the summer the flies made it worse. To prevent this I put on a daub of tar, and in a few weeks the wart was killed and disappeared. I have frequently tried it on cattle and horses, and seldom had occasion to make a second application. The remedy is simple and effectual.

Remarks.—I am not able to see any chemical property in the tar to effect a cure; yet I have not a doubt of the fact, as above given. If this fails in any case apply the following:

No. 1. Warts, Effectual Cure for On Horses or Persons.

Take full strength acetic acid, and with a three-cent camel’s hair pencil (brush) just fairly wet the wart all over. A few applications will cure them on man or beast. Don’t put on enough to run off the wart upon the skin, to make a sore.

No. 2.

Put 1 oz. of powdered sal-soda (washing soda) in a 2 oz. vial and fill with water, and wet the warts thoroughly with this, is also effectual by a few applications, in all cases, as with No. 1. A little of this soda in water to soak in the feet, for those who have corns, (which see) will soften up the dead part and make its removal easy.

Worms—Successful Remedies.

“For the long worm which inhabits the small intestines of the horse, and sometimes find their way into the stomach, a Mr. Rhodes, a farmer near Ann Arbor, Mich., gave me the following as a certain cure: Burn black ash bark and give the ashes in 1 tablespoonful doses, in his feed every morning for three mornings, then skip three, till nine doses are given.

Remarks.—Believing that the ailili arising from these ashes coming in contact with the linings of the stomach and intestines will correct the mucous condition of these parts, in which the worms find themselves, I give it, expecting to cleanse the parts and
eradicate the worms. If this fails in any case, however, give a drench of linseed oil, 1 pt., with \( \frac{1}{4} \) oz. of spirits of turpentine in it, and repeat the third morning after, if the first dose does not carry them off freely. The same you will see is used as an injection for pin-worms, below. It is safe in either method of using.

**For the Pin-Worms that Infest the Rectum.**

I cannot see why a solution of weak lye, made with wood ashes, and injected for a few times, will not also eradicate them. Some of these however, almost always go higher up, to get out of the reach of injections, and after a week or ten days return to the rectum, when the same should be repeated, to clear them out entirely, no matter whether you use this, or inject the usual remedy, which is linseed oil, 1 pt., with \( \frac{1}{4} \) oz. spirits of turpentine in it, injecting every morning for a week, with the repetition as above. It is well also, after either of the treatments, to tone up the system with the tonic condition powders, which never come amiss, spring and fall, although no special disease may manifest itself.

**Thrush.**

**Cause.**—Continued paring of the frog of the foot, damp stalls and contracted feet.

**Symptoms.**—An offensive discharge from the sensitive frog.

**Remedy.**—Wash the foot with warm water and castile soap and wipe dry. Remove to a dry stall. Sprinkle powdered vitriol in the crevices.

**Vicious Horses—Efficient Method of Subduing.**

“A new and very simple method of subduing or training vicious horses was recently exhibited at West Philadelphia, Pa., where the manner in which the very wildest horses were subdued so quickly caused the Record of that city to make the following report, and to call it "astonishing." It says: “The first trial was that of a kicking or "bucking" mare, of which her owner said had allowed no rider on her back for a period of at least five years. She became tame in about as many minutes, and allowed herself to be ridden about without a sign of her former wildness. The means by which the result was accomplished was by a piece of light rope which passed around the front of the jaw of the mare just above the upper teeth, crossed in her mouth, thence secured back of her neck. It was claimed that no horse will kick or jump when thus secured, and that the horse, after receiving the treatment a few times, will abandon his vicious ways forever.”

**Method for Shoeing.**

“"The method for shoeing was equally as simple. It consisted in connecting the animal’s head and tail by means of a rope fastened to the tail and then to the bit, and then drawn tightly enough to incline the animal’s head to one side. This, it is claimed, makes it absolutely impossible for the horse to kick on the side of the rope. At the same exhibition a horse, which for many years had to be bound on the ground to be shod, suffered the blacksmith to operate on him without attempting to kick, while secured in the manner described.”

**Remarks.**—Much less trouble than the old Rance plan; and the more simple the plan the easier it is to use it. If this ever fails, put under an ear, as they do in Mexico.
White Feet in Horses, or Spots on Forehead—How to Produce a Match.

Take a piece of Osnaburg (coarse linen cloth, originally made in Osnaburg, Germany) the size of the white on the corresponding foot; spread it with warm pitch and apply it around the foot, tying it afterward to keep it on in the right position; let it remain on for three days, by which time it will bring off the hair clean and make the skin a little tender; then take elixir of vitrol, a small quantity, anoint the parts two or three times; or use a common weed called arse-smart, a small handful, bruise it and add to it about a half pint of water; use it as a wash until the soreness is removed, when the hair will grow entirely white.—Cricket on the Hearth.'

Remarks.—If this will do the work on the feet, of which I have no doubt, it will do the same upon the forehead, and in either case will do the horse no harm.

Kicking and Runaway Horses—How to Cure the Habit.

The Kicking.—If you have a horse which is accustomed to knocking out the dash-board with his heels, when things do not work to please him, proceed as follows: Place around his neck a band like that used for riding with a martingale. Then take two light straps (made for the purpose) and buckle them to the bits, on each side, and pass them through the neck-band, and also inside the girth, and buckle them securely to each fetlock of the hind feet, taking care in the making to have them of the proper length. When a horse is rigged in this manner, if he attempts to "kick up behind," each effort will jerk his head down in such a way as to astonish him, perhaps throw him over on his head. He will make but a few attempts to kick when he finds his head thus tied to his heels, and two or three lessons will cure him altogether.'

For the Runaway.—The method for the runaway is equally simple and effectual: First of all fasten some thick pads upon your horse's knees, then buckle a strap about the size of a rein, upon each fetlock forward, and pass the straps through the same rings or som part of the harness near the shoulder on each side and lead the strap back to the driver's hand as he sits in the buggy. He has thus four reins in his hand. Start the animal without fear; don't worry him with a strong pull upon the bit, but talk to him friendly. When he attempts to run he must, of course, bend his forward legs. Now pull sharply one of the foot reins, and the effect will be to raise one of his forward feet to his shoulder. He is a three-legged horse now, and when he has gone on in that way a little distance drop the constrained foot and jerk up the other. He cannot run faster on three legs than you can ride, and when you have tired him on both sides pretty thoroughly, or if he refuses to take his trot kindly and obey your voice and a moderate pull at the bit, you can raise both his fore feet, drop him upon his knees, and let him make a few bounds in that position. The animal will soon find that he cannot run away, that he is completely in your power, and by soothing words you will also be able to convince him that you are his friend. He will soon obey your commands, and will be afraid to extend himself for a run. Within a week or two some horses that were quite valuable animals in respect to everything but their bad habits of kicking and running in harness, were cured by methods described above.'—Boston Herald.

Remarks.—These plans, if managed skilfully, must prove effectual and satisfactory; and they ought to be generally known, for there are many horses given to one or both of these viciously evil habits.
Amount of Food Necessary for a Horse at Work.

The English railway (or, as we call them here, street cars) companies, feed their horses mixed fed, about as follows, for six horses:

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<tr>
<td>Hay</td>
<td>376 lbs.</td>
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<tr>
<td>Straw</td>
<td>84 lbs.</td>
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</tr>
<tr>
<td>Oats</td>
<td>336 lbs.</td>
<td></td>
</tr>
<tr>
<td>Indian Corn</td>
<td>252 lbs.</td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td>84 lbs.</td>
<td></td>
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<tr>
<td>Bran</td>
<td>14 lbs.</td>
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</table>

All mixed evenly together and ground; then, I should judge, mixed proportionately with the moistened cut hay and straw. This makes an average of 11 lbs. of the mixed hay and 16 lbs. of mixed grain for each horse daily. A fair feed, if not overworked, as many of them do in our cities.

A Pennsylvania farmer says: Two quarts of meal per day is not enough for a horse that is working; but an excellent mixture of grain is cracked corn, 1 bushel; and oats, 2 bushels, well ground and mixed with the corn. (See Mr. Stewart's Best Feed, or rations for Work Horses.) Of this he goes on to say: A small horse that is driven or worked, should have 2 qts. at a feed, given three times a day, with 5 lbs. of hay (cut), night and morning; and a horse that is not working, but will be soon, would be the better for a daily feed of 2 qts. of grain (oats) given at noon.

Remarks.—This undoubtedly refers to a horse which is not being fed upon the meal mixture, but simply hay, or other coarse food.

For Old Horses.

For old horses the oats should most certainly be ground, and their coarse food also cut, dampened and the ground oats mixed with it, as their teeth are not in condition to grind for themselves; and if they are left to do it they do not get half the value of the grain. It is worthy of attention. Young horses may do tolerably well grinding for themselves; but they will do much better if it is ground for them.

Apples Valuable for Horses.

Remarks have been made in connection with the subject of carrots, parsnips and other roots of valuable food for cattle, etc., in which apples are shown to possess largely, the power of dissolving other coarse food for them, why not then good for horses? (See this pectine, or dissolving power, described in connection with carrots and other roots for cattle. Apples possess it in greater abundance than almost any other article known). Of course it is only sour apples that have this power, and hence it is only them that should be fed. One writer says: I have occasionally fed sour apples to my horses, with excellent results. They are a certain cure for worms. I feed half to a whole pail full once a week. Another one says: I am in the habit of turning my horses into the orchard in the fall, where they can eat as many apples as they like. I find they derive much benefit from them, and gain flesh much more rapidly than others which did not receive an apple feed.

Parsnips Valuable as Food for Horses.

In the article above referred to, parsnips were spoken of as having been fed in France by a horse breeder there, for twenty years, with better success than when he
used to feed carrots, from the larger amount of pectine, or pectic acid, which they contain. It is from the presence of this dissolving power in apples, as well as parsnips, carrots, beets, rutabagas, etc., which make them so valuable as food, when properly cut and mixed with other coarse food, as hay, corn-stalks, straw, etc., all properly cut, both for horses and cattle.

THE COW.

She is indispensable. Every family that possibly can should have one—a good one and should treat her with care. Although they ought to have the best of feed and care all the time, if rich milk, good butter or cheese are expected from them; yet, the time when they need more especial care, is for a couple of weeks before and at the time of calving, for if they pass this period without accident, and do not have milk-fever following it, there is generally but little trouble with them. This disease is not as prevalent in the Western States as in the Eastern, especially Rhode Island, Massachusetts and Connecticut, and it is believed to be more prevalent on account of their higher feeding to obtain all the milk possible from them, and also that of a rich butter or cheese producing quality, and hence meal enters largely into their feed, which alone, is of a heating nature, and has a tendency at this particular period, it is believed, to make the cow more likely to have milk-fever.

Milk Fever To Avoid.

"I am in the habit of giving water to cows as soon as they drop their calves, and I have never known a case of milk-fever when the cow had all the water she wanted soon after calving, and the water was kept supplied at short intervals, giving a plentiful at a time, fresh from the well. In all cases of milk-fever that I have known anything about, the cows went without water for a long time, and then were allowed to drink a large quantity, and the reaction was too great for the system.

"Cows, when fat," Mr. Putnam says. "should have no heating food for two weeks before calving. And, first, to milk the cow as soon as she calves, and then to give her a bucket of water fresh from the well, such as a thirsty man would relish. In half an hour give her another, and so on until she is satisfied." If there is an early and large flow of milk before calving it is best to milk it out as often as necessary to prevent too great distention and heat.

If the disease sets in, give the following:

No. 1.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Cream of Tartar</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Carbonate of Magnesia</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Salt</td>
<td>4 ozs.</td>
</tr>
<tr>
<td>Common Molasses</td>
<td>1 pt.</td>
</tr>
<tr>
<td>Water</td>
<td>2 gals.</td>
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</tbody>
</table>

Mix, and let the cow drink it. Follow in half an hour with this:
No. 2.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Powdered Rhubarb</td>
<td>½ oz.</td>
</tr>
<tr>
<td>Sulphate of Magnesia</td>
<td></td>
</tr>
<tr>
<td>Salt</td>
<td>2 ozs.</td>
</tr>
<tr>
<td>Saltpetre</td>
<td></td>
</tr>
<tr>
<td>Leptandrin</td>
<td></td>
</tr>
<tr>
<td>Podophyllin</td>
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</table>

Mix, and give in bran mash. Let the cow have clean, cold water, about half a pailful, each hour.

Remarks.—Having become fully satisfied of the necessity of giving fresh, cold water to persons in fever, as shown by the remarks following Typhoid Fever, and reasoning from analogy (the likeness or agreement between things, although the circumstances may be different), I see at a glance that the cool water to satisfy the cows, this within a reasonably short time, (a pailful every half hour, as Mr. Putnam has found, as above given) is the true way to prevent a cow from having milk fever at all; for no person, animal, or thing, can long continue hot (and all fever is heat) if filled or covered with cold water. Nothing further need be said in favor of Mr. Putnam's plan. It will be safe to follow it.

Milk—To Increase the Flow in Dairy Cows, and Best Food to Insure it.

Milk to Increase.—The agricultural editor of the Bee-Keepers' Journal vouches for the following, handed him by one who had tried the plan to increase the flow of milk, and I have seen the same thing given in various other sources, and from the nature of the mixture I have every reason to believe it good. He says:

No. 1.

"If you desire to get a large yield of milk, give your cow, three times a day, water, slightly warm, slightly salted, in which bran has been stirred at the rate of 1 qt. to 2 gals. of water. You will find that your cow will gain 2½ per cent. immediately under the effects of it, and she will become so attached to the drink as to refuse clear water, unless very thirsty; but this mess she will drink almost at any time, and ask for more. The amount of this drink is an ordinary pailful at each time morning, noon and night. Your animal will then do her best at discounting the lactic acid (lacteal, the Latin word for milk, hence "lacteal," milky) fluid."

No. 2—The Best Food for Increasing the Flow of Milk.

In the Eastern States, as before stated, milch cows are fed largely on corn-meal, but I have the statement of a well-informed dairyman, that equal parts, by measure, of cornmeal, ground oats and wheat-bran, well mixed, makes the best and most profitable feed for increasing the flow of milk, being much less heating than cornmeal alone, and still very nourishing and satisfactory to the animal as well as to the dairyman, by saving considerable expense, while at the same time he gets his increased flow of milk, and the cow is not too fat for comfort and health, as they often become on cornmeal alone."
No. 3—Ointment for Swelled Bags, or Udders of Cows.

Sweet Oil

Pulverized Camphor Gum

Dissolve over a slow fire and rub in well two or three times daily. The author thinks the ointment for drying off cows, below, fully equal, if not even better than this camphorated oil, although only swelling is to be remedied here, which generally arises from colds.

No. 4—Choked Cattle—Sure Remedy.

J. J. B., in Country Gentleman, speaking of choked cattle, says: "The following recipe ought to be printed twice every year, as it is a sure remedy: Take of fine-cut chewing tobacco enough to make a ball the size of a hen's egg, dampen it with molasses, so it adheres closely; elevate the animal's head, pull out the tongue and crowd the ball as far down the throat as possible. In fifteen minutes it will cause sickness and vomiting, relaxing the muscles so that the potato, or whatever may be choking it, will be thrown up."

Remarks.—It is almost absolutely certain that the tobacco will cause the relaxing of the muscles, and consequent throwing up of the contents of the stomach, and a cure is just as certain as a relaxation. The laying of moistened tobacco upon a person's stomach, with lock-jaw, has relaxed them and saved the patient. It must not be kept on so long, however, as to cause deathly sickness.

No. 5.—To Dry Off Cows, Mares and Other Animals.

Tar and good Vinegar, each 8 ozs.

Spirits of Turpentine 6 ozs.

Tallow 4 ozs.

Beeswax 2 ozs.

Camphor Gum, powdered by druggist .2 ozs.

Directions.—Boil tar and beeswax, tallow and vinegar together for fifteen minutes; then, when removed from the fire add the turpentine and camphor, and stir till cold. Milk the cow or mare and rub into the udder and along the milk veins till the milk ceases to flow.

For Caked Breasts.

Use the same but leave out the tar.

No. 6—Hollow Horn To Cure.

Alcohol

Gum camphor

Mix.

Directions.—When the gum is dissolved put half of the mixture into one ear of the animal and as soon as it has done snorting and blowing, put the other half into the other ear. Once, cures every time. Or use

No. 7—Old Treatment of Hollow Horn.

"The old treatment was to bore into the horn with a gimlet and inject vinegar, pepper, salt and water, and after this was injected into the horn, a couple of pieces of fat, salt pork, the size of one's two forefingers, with a teaspoonful of cayenne put in a
slit in each slice, was placed between the animal’s grinders, and the head elevated until it chewed and swallowed them, and next day repeat without the pepper if dumpishness is still manifested."

**No. 8—To Cure Fleshy Tumors Upon Cows and Calves.**

- Bin, iodide of mercury
- Cosmoline or vaseline

Thoroughly mixed and well rubbed upon the tumors.

**No. 9—Hoven or Bloat in Stock—Prevention and Cure.**

O. J. L. of Modest Town (a very appropriate name for a place where the men are so modest they dare not give their name when reporting for an agricultural paper on the above disease), Va., made a report of the death of a cow and calf to one of the farm papers, I think the *Farm and Fireside*, to which the veterinary surgeon, A. T. Wilson, made the following report: "Your cow and calf both died from hoven or bloat, a very common result of injudiciously turning cattle into a rich clover patch. To prevent bloat, turn them in the pasture for an hour or so every day or week until they get used to it. To cure bloat, when seen in time, use two ounces each of hyposulphite of soda and tincture of ginger added to a quart of cold water."

**No. 10—Diarrhoea of Cattle.**

**Remedy.**—Three pecks of boiled potatoes, fed in the course of the day, in three messes, warm, is an excellent remedy for diarrhoea in cattle.

**No. 11—Scours in Cattle.**

**Remedy.**—Mr. James Door, of Dorchester, Mass., recommends fine wheat flour as a cure for scour in cattle. He says: "Take 1 quart of the finest flour, mix smoothly with water, making just thick enough to run, and administer at one dose. A second dose may be necessary, but one is generally sufficient for a cure."

**No. 12—Death for Lice on Animals or Plants.**

Pour boiling water (1 gal.) on 1 pound of tobacco leaves; in 20 minutes strain and use it judiciously (simply wetting the parts with a sponge) on animals; on plants more extensively. Or,

**No. 13.**

- Raw linseed oil
- Kerosene
- Sulphur

Mix and rub on all parts of the animal where lice are found.

**No. 14. Salt as a Vermifuge, its Value for Cattle, Horses, Sheep and Hogs.**

The *New York World*, speaking of salt for stock, says: "If you want to keep your cattle, horses, sheep and hogs healthy, give them salt regularly. There is no better vermifuge than salt. Much of the so-called hog-cholera is due to intestinal worms. All animals desire salt, showing that it is a want of their nature, and undoubtedly for wise purposes."

**Remarks.**—Who can fail to see the value of salt for all stock, and that it should be given regularly?
No. 15.—Cows Accidentally Overeating Meal—What to do.

When a cow has accidentally eaten her till of meal, do not allow her to drink; and as soon as discovered, according to the size of the animal, give a drink of from one to two pounds of Epsom salts, dissolved in warm water, and repeat the dose in six hours, if it has not operated; in six hours more, if it has not yet worked a hole through, repeat half as much more, and so on continue until a movement is obtained.

No. 16.—To Prevent a Cow from Kicking while Milking,

To a ring or snap in her nose attach a rope, then tie it to a beam above so as to elevate her nose a little. This will give her something else to think of—then, if you are gentle, you will have no trouble.

Calves—Raising by Hand Hay, Tea, Etc., for Them.

With good pasture for calves to run in, early cut and properly cured hay, of which to make the hay tea; oil-cake or home-ground oat meal, and the milk of one cow, three calves, after they are ten days old, have been successfully kept, and all the cream from the cow made into butter after the calves were four weeks old. The plan was as follows:

Directions. Boil good Timothy hay, 1 lb. (better cut in a cutter, if you have one) and boil in water, 6 qts., for an hour, keeping covered, and make up for what may evaporate; then strain and let cool. While cooling, stir three table-spoonfuls of oil-cake, made fine, or pretty finely ground meal from oats, into 1 qt. of boiling water, slowly, as if making "hasty pudding," and when properly cooked stir this and the milk of the cow, with a very little salt, into the hay tea, and give equally to the three calves. At the first, feed while warm, but after a week or two it does not matter if given cold, but with each two weeks increase the oil-cake, meal or oat-meal, one table-spoonful for each calf. And it was claimed that at three months old, calves raised in this way looked as well as those fed on milk entirely. They began to feed on grass at a month old, and increased their feeding on grass until they depended upon it almost entirely at three months old. The trifle of salt must not be forgotten; and if they began to scour, the milk was boiled and one table-spoonful of flour stirred in before it was added to the tea. But I should stir the flour into the milk while scalding. After the first week there was no trouble of this kind, unless over-fed.

Indigestion of Calves Remedies For.

Calves that are fed on milk principally, and carelessly managed, are liable to indigestion: becoming "pot-bellied," dull and thriftless, appetite varied, sometimes voracious, then not caring for their food at all; bowels irregular, or else regularly loose, and their passage offensive, which, if not soon remedied, the diarrhoea becomes chronic and troublesome to cure. The trouble is believed to arise from accumulation of milk in the fourth stomach (which is the one used until they begin to ruminate—chew the cud); hence laxatives are first called for, such as castor oil or linseed oil, with bi-carbonate of soda (baking soda) and ginger, and if really scouring, 15 or 20 drops of laudanum should be added. The dose for a calf of three months, of castor oil, would be 2 ozs., with ½ oz. each of the soda and pulverized ginger, with the laudanum as above, if scouring. And for a few days, or until the condition is greatly improved or health estab-
lished, give morning and evening, salt, soda and pulverized ginger, ½ oz. each, in a little milk; or if the calf is flatulent (windy), dull and weak, add 1 oz. of sulphate of soda (glauber salts), to the salt, soda and ginger, twice daily till corrected. The same is good for cows.

The diet in all cases must be carefully attended to. If unweaned, the calf should have its milk fresh and sound thrice daily.

**Scours in Cattle, Horses and Calves, and Cholera or Diarrhoea in Persons.**

Lewis Boynton, of Farmington, Bledsoe county, Tenn., in answer to an inquiry about scouring in cattle, in one of the papers, says: "Frequently a handful of salt will relieve cattle and horses of scours. If it does not afford relief in twelve hours, I have recourse to a remedy for cholera that never fails: Spirits of camphor, tincture of rhubarb, and laudanum, equal parts of each. Mix. Dose—For an adult, 30 drops; for a horse or cow, a dessert spoonful; for a calf, 1 teaspoonful. If not relieved in three hours, repeat the dose.

Remarks.—For a child I would give 8 to 10 drops, according to age, and repeat on persons in half an hour, if needed. Give in a little sweetened water to children. For stock, in ½ pt. of water as a drench. It will be found very valuable.

**Foot Rot.**

Wash the foot clean with castile soap and rain water; then apply an ointment made of

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<tr>
<td>Lard</td>
<td>½ lb.</td>
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<tr>
<td>Red precipitate</td>
<td>2 ozs.</td>
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<tr>
<td>Mix thoroughly and rub well into the sores.</td>
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**Faradel—Constipation.**

The mouth is hot and dry, the eyes wild, appearance haggard. The dung is hard and voided in small quantities. Give a strong dose of epsom salts, dissolved in rain water. Follow in an hour with a cooling drink of water, into which put an ounce of pure saltpeter. Continue with cooling drinks and bran mashes.

**Garget.**

This disease makes its appearance in the udder of the cow, at the time of calving. The udder is painful, swollen, hard. The milk is thick and drawn with difficulty.

Remarks.—Reduce the cow feed. Let the calf suck all it will. Wash the udder with warm water and wipe dry. Then take

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<tbody>
<tr>
<td>Lard</td>
<td>1 lb.</td>
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<tr>
<td>Mercurial ointment</td>
<td>1 oz.</td>
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<tr>
<td>Melt together and apply as hot as the cow can stand.</td>
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**Murrain.**

A dangerous disease, but not often found in the United States. The symptoms are "fever, quick pulse, cold horns, swollen eyes. Sometimes there is diarrhoea." Separate the sick from the well. Bleed the animal. Give ½ lb. of epsom salts in soft water twice a day for several days. When tumors appear anywhere wash them with the following solution:

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<tbody>
<tr>
<td>Sulphate of zinc</td>
<td>4 drs.</td>
</tr>
<tr>
<td>Rainwater</td>
<td>1 pt.</td>
</tr>
</tbody>
</table>

Nurse the animal carefully.
Mange—Itch in Animals.

It is produced by a parasitic insect and is quite contagious. Remove the animal to new quarters, wash it thoroughly with warm water and castile soap. Rub the sores well with an ointment made of

- Sulphur
- Mercurial ointment
- Powdered white heliobore

Mix well. Use for hogs also.

Red Water.

Cause, damp, wet pasture. Symptoms are purging, followed by constipation, great pain; the animal moans, ceases to chew the cud, is feverish and strains in passing water.

Remedy.—Change the pasture. Dissolve half a pound of Epsom salts in a pint of boiling water, add 4 ounces ginger, and give as a purgative. Give an injection of warm soap suds.

Chaff—To Remove from the Eye.

The surest way is to take a silk pocket handkerchief, draw it over the finger, raise the lid as much as you can easily and put the covered finger in and draw out the chaff. If your finger is not too large you can pass it round the ball till you get the chaff. Flax seed put in the human eye is good to take out dust or specks. Why not put three or four into the cow's eye? They will swell and form a mucilage that will pick up the chaff, and all will come out together.

Fetters.

Good fetters can be made of wide bands of heavy leather, to each of which sew on one end two buckles fastened with lighter leather, and on the other end the straps to correspond. Then connect these bands by a chain 6 to 8 inches long with a swivel in it. These can be put on bulls that you wish to let run, but don't wish to copulate with the cows or heifers. Put them on the fore-legs. Use rams the same way. You will find it better to let the males run than to confine them alone. Put the straps and buckles outside of the heavy pieces. The end link of the chain must be made like the cock-eye for harness traces.

HOGS.

Hog Cholera.

This disease is not caused by any one thing alone, but by a combination of unfavorable circumstances. Give your hogs clean quarters, pure water and a shelter from the hot sun by day and chilly cold nights; give them a change of pasture, and feed regularly and you will not be troubled with hog cholera. On the other hand give them close, wet, muddy, cold quarters, stagnant and filthy water to drink, make them root over the same old lot from year to year and you will surely reap the penalty.
The hog lot should be changed every year and made into a garden or cornfield, and the hogs put in a new lot. No rings should be in their noses, they should be free to root in the fresh ground.

No. 1.

To prevent cholera put into a trough so the hogs can eat freely the following:
- Black antimony powdered: 1 lb.
- Copperas: 7 lbs.
- Salt: 1 lb.
- Sulphur: 1 lb.
- Wood ashes: 1 pk.

Mix all thoroughly. This is cheap and effective as a preventive.

No. 2.

For a cure use the following:
- Madder: 1 lb.
- Sulphur: 1 lb.
- Rosin: 1 lb.
- Saltpeter: 1 lb.
- Black antimony: 1 lb.
- Assafoetida: 3 oz.

Powder and mix well, and feed three tablespoonsful to each five hogs every other day, in bran mash with salt added.

If a hog gets dumpish, lies round, tries to get into the litter or straw of the pen he is coming down with the disease. Remove him at once to a dry pen and give him a tablespoonful of the mixture once a day in table slops or a gallon of water. To make doubly sure, take a half pint of soft soap, one tablespoonful of lard and one of pine tar, warm and mix well and drench the hog. If the hog is too large to handle easily tie it to a post with a rope round the upper jaw. The best remedies may fail. The State Board of Agriculture of Illinois a few years since sent out to the swine breeders of the State a series of questions as to the cause and best known remedies for the disease.

No positive cure was claimed to be known. Prevention by care, removing sick ones from the herd, etc., were the leading answers.

If diarrhoea in the hog sets in, take and steep 2 ozs. of inner bark of white oak, mix in two ounces of alum, and give. If it continues obstinate give 1 pound of lard, melted, with tablespoonful of turpentine.

Charcoal, soft (mineral) coal, or properly and thoroughly burned corn are almost absolutely necessary for hogs while being fattened.

Avoid a too sudden change from a half starved condition to one of high feed.

Sows Eating their Pigs—To Prevent and Cure the Habit No. 1.

To prevent it, keep a trough of the following mixture where all the hogs can have access to it: Wood ashes, salt, sulphur, powdered charcoal, in about equal bulk mixed, and see especially that sow partake of it about this period; then if they commence the eating their young, give them half as much more as long as they will eat it, and see also that they have frequent tastes of this preventive mixture.

No. 2.—To Cure the Habit.

A little salt daily and a handful of charcoal to each hog once a week; it is claimed, will prevent cholera and other diseases; then, if the above mixture, No. 1, is
kept where all hogs can eat of it at pleasure, the author will guarantee it preferable to the salt or charcoal alone. Still, if cholera was prevailing in a neighborhood, he would advise some of the preventive found under that head, having antimony, saltpeter, etc., with the salt and charcoal. Keep on the safe side, is a good motto to go by. And it is by thus satisfying the natural desire for what their systems need, that a ravenous taste is prevented, that of eating their pigs.

**Scurvy Pigs—Simple Remedy.**

Wash the scurvy hair and all parts troubled with the scurf thoroughly every day for a few times with buttermilk. A farmer who has tried this so many times as to be sure of his position, says: "It will entirely and speedily remove scurf."

**Lice on Hogs—Easy Remedy.**

"Carbolic acid, 1 oz., to water, 10 ozs., makes a wash that destroys the lice without injury to the hog. Then it would on other animals, as cattle, cats, dogs, fowls, etc.

**Kidney-Worm in Hogs, and "Fluke" in Sheep—Remedy For.**

The *Rural Almanac* asserts that kidney-worm in hogs, and the fluke-worms that infest the livers of sheep are identically the same. A parasitic insect—an insect drawing its whole support from another animal, as lice upon an animal, or worms in them—and the editor claims also "that lye made from hard-wood ashes, if given daily, will work a cure: also rubbing turpentine upon the loins."

**Remarks.**—"There is nothing said as to the amount to be given, but we should say, if the lye is pretty strong, two or three table-spoonfuls in small amount of slop, two or three times daily, would be plenty. Of course it could not be given without diluting, else it would destroy the mucous membrane of the mouth, throat, etc., as cows have been killed by drinking lye left where they could get it. But why not salt and ashes mixed, in place of the salt and charcoal mentioned just above? If they will take enough of it, it will do as well, without a doubt, and I have no doubt of their value in such cases."

**Catarrh.**

Inflammation of mucous lining of the nose. If attended in time can be easily cured. Place the animal in a clean, warm sty. Feed sparingly on light slops and bran mash. *No corn*

**Mange Itch.**

See under Cattle, the recipe for.

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**SHEEP.**

The sheep is the most profitable animal you can have on the farm, especially if the land is poor or worn out. "Some farmers of our acquaintance," says the *American Agriculturist*, "feel an antipathy to sheep for the reason that they "bite close." We consider this their chief recommendation. They can only bite where the pasture is short, only on a poor farm. A poor farm will necessarily be encumbered with briars, weeds, and brush in the fence corners. Under such circumstances we should say to a
A Few Short Rules for the Care of.

The American Emigrant Company's Circular says:

1. Keep sheep dry under foot with litter. This is even more important than roofing them. But never let them stand or lie in the mud or snow.
2. Drop or take out the lowest bars as sheep enter or leave a yard, thus saving broken limbs.
3. Begin graining with the greatest care, and use the smallest quantity first.
4. If a ewe loses her lamb, milk her daily for a few days, and mix a little alum with her salt.
5. Give the lambs a little milk feed at time of weaning.
6. Never frighten the sheep if it is possible to avoid it.
7. Sow rye, for weak ones in cold weather, if you can.
8. Separate all weak, or thin, or sick, from those strong, in the fall, and give them especial care.
9. If any sheep is hurt, catch it at once and wash the wound with something healing. If a limb is broken, bind it with splinters tightly, loosening as the limb swells.
10. Keep a number of good bells on the sheep.
11. If one is lame, examine the foot, clean out between the hoofs, pare the hoof if unsound, and apply tobacco with blue vitriol boiled in water.
12. Shear at once any sheep commencing to shed its wool, unless the weather is too severe.

Remarks—These are excellent rules for the care of sheep, but as they do not give the strength of the vitriol wash for the foot, in rule 11, it will be well to use the recipe for foot wash in cases needing such treatment.

Care in Winter.

The weak ones should be separated from the strong, and wethers from the ewes; and especial care should be given to ewes that are to drop their lambs early. The springing of the udder is an unfailing sign of approaching parturition. The ewe should
then be removed to a separate pen and kept quiet, but should be visited at least every three hours, and the last thing at night. It is rarely that any help is needed, except in very cold weather, to wrap a piece of soft blanket about the lamb, and to help it, as soon as possible, to get its meal from its mother, when it will be all right, and the ewe may be left for a few hours.

If apples are abundant in winter, a feed once or twice a week may be given to sheep; or in their absence, a feed of turnips or other roots, cabbage, etc., may be given them as often as necessary to avoid costiveness, or stretches, says a writer, an ailment common to sheep in this country, but unknown in Great Britain, where turnips are fed daily. Sheep feel the changes from the green pastures to the dry feed of winter as quickly, if not more so, than other of our domestic animals.

**Care—What it Will Do.**

"Care will make carcass; care will make constitution; care will save fodder; care will ward off disease; care will make fat, and fat will make wool and grease, and grease will make money, and that is what we are after. Yes, care will do one other thing, care will make blood.

**Sheep vs. Dogs—How to Give the Advantage to the Sheep.**

A remedy for sheep-killing dogs is given by a correspondent of the *Prairie Farmer*, which is better than legal enactments, as the case is settled without complaints, without lawyers, judge or jury. He says: "I have kept a flock of sheep for several years, varying from 100 to 2,000 head, and for the last eight years have not lost a sheep killed by dogs. I keep my sheep yarded nights, and occasionally, varying from once in two weeks to once a month. I go out at bedtime and place around the outside of the pen bits of meat containing strychnine, which I take up again early in the morning if not eaten during the night. Result, immunity from dogs, and an old well on the farm has received a layer of dogs and a layer of dirt until it is about full. I have never killed a man's dog through malice, or anywhere except on my premises and in protection of my own property, and have not in my knowledge, received any injury in retaliation for the death of a dog. The plan is just and right, and every fair-minded man must acknowledge it."

**Remarks.**—The author can see only one point in this plan which may be wrong. It is in this, that he put out his strychnine meat only once or twice a month, whereas I should think twice a week would be better if there were many dogs about.

**Foot Rot in Sheep—Successful Remedy—No. 1.**

<table>
<thead>
<tr>
<th>Sulphuric acid</th>
<th>2 ozs.</th>
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<tbody>
<tr>
<td>Water</td>
<td>1 oz.</td>
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</table>

Mix and put two old copper cents into the mixture and when they are dissolved by the acid it is ready for use.

**Directions.**—Remove all the rotten and decaying parts of the hoof with a knife, one such as the black-smiths use in shoeing horses is the best. Avoid if possible any bleeding; then apply the mixture thoroughly to every part which was diseased. Once will generally be sufficient; but if there is any disease between the hoofs clean out all you can with a knife and then draw through a piece of soft cord wet with the mixture, make thorough work to prevent its spreading. After the disease is killed apply pine
tar over the affected part to protect the foot from dampness and to help hold the acid mixture.

No. 2.

Carbolic acid crystals, 1 oz., water enough to dissolve it. Then put in a piece of copper, or an old copper cent, and let it stand until the acid stops acting on it. Be sure not to apply till the action has ceased. Then clean the hoof and apply as No. 1.

Preventive of Foot Rot in Sheep.

A Mr. Karkeek, who is claimed to be authority, writes to one of the agricultural papers that when the prevalence of wet weather makes it probable that foot rot may set in, "it is easily prevented by carting a quantity of earth and throwing it up in the form of a mound in the center of the yard attached to the shed, and upon this mound strew small quantities of slacked lime."

Remarks.—This confirms the general idea that foot rot is brought on by external causes rather than internal, and hence the idea given is the "Short Rules for the Care of Sheep," and that is: "Keep sheep dry under foot with litter," etc. Sheep dearly love rolling or even hilly land, and cannot be well kept on low, wet grounds, and especially so if there are no knolls or elevated dry grounds upon which they can gather themselves to rest and sleep, and hence the advantage of the mound in the yard, or litter to keep their feet dry in winter. It is well also to keep a mixture of salt and sulphur where the sheep can reach it and take all they want. Use twice as much salt as sulphur.

Sheep Ticks—Dip and Other Remedies For.

It is important, soon after shearing sheep, to see that the lambs especially, are freed from these pests; for after shearing, to get away from the light and the exposures of the cold, when the old sheep have parted with their covering, the ticks will escape to the lambs, often to such an extent as to stunt their growth, reduce them in flesh, and seriously weaken them by the loss of blood: when otherwise they would be in their best condition. The Hearth and Home gives us the usual strength of the dip necessary to free them when numerous, as follows: "Cheap plug tobacco, 5 lbs., broken up and boiled in two pails of water; then 30 gallons added, will make dip enough for 100 lambs or 50 sheep. After dipping keep them dry a day or two."

To dip them have a water-tight box large enough to hold a lamb or a sheep, if any are to be dipped, so as to entirely cover them with the dip. Arrange a sloping table at the side of the box which will allow all the liquid to run back into it. Then take a lamb by the forelegs with one hand, with the other cover up the mouth and nostrils; let an assistant take the hind legs, and immerse the lamb entirely, long enough to allow the dip to penetrate the wool, lay the lamb on the sloping table and squeeze out the surplus liquid, and the operation is complete. If this is done every year, it is claimed that ticks will soon disappear altogether; but it strikes the author that ticks are as natural to sheep as lice are to hairy animals, and that they must be destroyed whenever they appear. If fowls are permitted access to the sheep yards they will eagerly search for ticks and pick them out of the wool, but we would rather trust to the more effectual process of dipping. Not long after this process of dipping, a careful examina-
tion of the lambs should be made, and if there is only occasionally a tick seen every one of them must be snipped with a pair of scissors, but if very many are left from a want of proper penetration of the dip into the wool, it must be repeated, to make a thorough destruction of them, to eradicate them from the flock, before cold weather sets in.

Scab in Sheep—Successful Remedy.

Take: Quicksilver. 1 lb.

Venice turpentine ½ lb.

Spirits of Turpentine. 2 ozs.

Melted Lard ¾ lbs.

Directions.—Work the first articles together thoroughly in a mortar; then mix into the warm lard and stir until cold. Apply to all scabs, and all places indicating the disease—at shearing, or whenever any indications appear—use a swab or sponge in applying, rubbing carefully when the skin demands it.

Remarks.—A farmer of Olney, Oregon, who has used it ten years, says: “It saves wool and sheep.” There is not a doubt of the success of this ointment for scab in sheep, and I have no doubt either, but that it will cure all eruptive skin diseases of persons. If less in amount is needed, keep the same proportions. Let it be applied in fine weather, else keep the sheep under sheds for a few days, lest cold, drenching rains might cause irritation from the quicksilver, which is mercury. (See scab remedies also for other animals. See Sulphur and Salt, Valuable for Sheep, above.) It is also claimed that sulphur, moistened with spirits of turpentine, and rubbed into the sores, will cure it. I am, then, of the opinion that it is caused by an itch mite, the same as itch on persons, which sulphur will kill; then why not cure scab, which is an itch, on sheep, dogs, and all other animals.

Sheep Marking Ink.

Linseed Oil 1 pt.

Litharge 2 ozs.

Lampblack 1 oz

Boil together, and it is ready to use: and it will not crisp or injure the wool.

Sheep Wash to Prevent Them from Barking Fruit Trees.

The following wash is recommended as a sure preventive of sheep barking fruit trees: ‘Take soap, the dirtier and stronger the better, and make very strong suds; dissolve ½ lb. whale oil soap in every six gallons, and into this stir, with brush or old stub of broom, sheep manure until it is as thick as good whitewash, and with this mixture wash the trees as high as the sheep can reach. It will be found that no sheep will come near enough to rub against them for at least two months, the time depending much on the amount of rain. Keep the mixture handy, and repeat the application as often as necessary—twice in a summer will suffice. Sheep running among fruit trees should have plenty of good fresh water; it is thirst that first induces them to gnaw the bark, but after they have once got a taste, they eat because they like it. The above mixture will effectually keep them away, and besides, it is a very good application for the health of the trees, keeping the bark smooth and fine and killing any insects that come in contact with it.”
Sheep Breeding.

Never use a lower breed of buck on a higher grade of ewe. If you do you raise only the lower grade of sheep and the ewe will never thereafter breed anything but the lower grade.

Scours in Sheep.

Mix 2 ozs. of lime water with 1 ozs. of raw linseed oil, and give when disease first appears. Give half a gill of ginger tea every four hours. Feed on gruel made of corn meal and flour, and put ginger in it. If dysentery intervenes give a teaspoonful of charcoal.

Loss of Appetite.

If a sheep loses its appetite give Chamomile Tea.

Stretches, or Constipation.

Give a porridge made of shorts. Feed on chopped roots. Let the sheep have exercise and good air.

POULTRY.

The hen is the most profitable thing you can have on your farm, and yet she is generally left to shift for herself. She should have her feed and water as regularly as the horse and cow, and her house should be kept as clean. As a rule the hen house is left from week to week or month to month without cleaning. Of course she gets lousy, or worse, gets the cholera.

To clean them and their house of lice follow these directions:

"Take out of the house every perch, nest-box, or movable thing; remove all battens, cleats, or anything whereby a crevice is made, so that the inside is smooth. Then make a whitewash of fresh lime, into which put two ounces of carbolic acid to a pintful. Wash the house thoroughly with this on the inside. Then wash the outside. Then smear the perches with a mixture of lard and kerosene, putting it on thick, so that when the fowls roost they will get some of it on their feathers. Also put some of it on each fowl, under the wings. This will clear the house, and the hens will clear themselves, if no recruits are furnished from the house.

"In a month, or less, if there is occasion, wash the house again, and grease the roosts; take care to fill all the holes and cracks in the poles. It would be well to pass the poles through a fire made of straw, exposing them to the flame, before greasing them."

Dust-Baths Necessary for Poultry to Keep them Free from Lice.

Unless you have a fire-place in your poultry house, take dry, fine sand, or dry dust from the road, twenty measures (the size to be governed by the number of hens to be provided for); wood ashes, five measures; and sulphur, one measure, and mix well together and place in large, shallow boxes, or in one corner of the poultry house; at all events, sheltered from rain and snow. They delight to bathe and
dust themselves in this, as much as boys delight to bathe and frolic in the creeks of a summer day; besides, it keeps the lice from troubling the poultry if the house and perches are kept free from them by washes and fumigation.

Water. Clean and Pure—Its Importance Daily for Poultry.

A writer in the _Fancier's Journal_ believes that cholera will seldom trouble poultry if they have a daily supply of pure water, and that "the omission to furnish it is one of the worst forms of cruelty to animals." Another writer says: "Poultry should be as regularly watered as horses, cattle or any of the domestic animals." These statements, from those in the business, should be taken as a "word for the wise," which is sufficient.

Fine gravel, unless they have easy and near access to it, should always be kept where the poultry can scratch and pick it over, as they will do daily, and eat it in considerable quantities as an aid in cutting their food in the gizzard.

Charcoal, broken finely, should also always be given them once or twice a week at all times of the year.

**Good Food for Hens.**

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Corn meal, oat meal and middlings, each</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>Bran</td>
<td>2 ½ lbs.</td>
</tr>
<tr>
<td>Bone meal</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Pepper (red ground)</td>
<td>¼ oz.</td>
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Mix evenly. Now take as much as necessary of this mixture and make still batter with boiling water and a little salt. Put in a pan and bake well. Crumble and feed. Of course you can feed the mixture dry, but the baking will pay. Use milk or cheap soup from scraps of meat or fresh bones to mix with, if you can afford it.

Give your hens access to lime. Give charcoal of the size of peas once a week, or burned corn; don't forget the gravel. Chop meat once a week and feed. It induces laying; so will boiled wheat, oats and barley, or buckwheat. Don't feed more at a time than they eat up clean.

To crowd on your young chicks for early market feed them by lamp light the last thing before you go to bed.

**Feed for Young Chicks.**

When they are 12 hours old give stale bread with milk, or boil an egg hard and chop it fine. When they are a day old add to this food curdled milk, scatter a few crumbs of bread crust on it so they will peck it. At a week old give boiled potatoes, boiled oat meal, mixed with a little bran, boiled rice, etc. Give no corn meal until three weeks old; when you do, cook it. When big enough, give _cracked_ corn, wheat, and ground oats; season their food slightly with salt and pepper.

Feed what they will eat up clean. Don't feed the young chicks on sour refuse stuff; give clean food. Fresh bones burned white and pounded fine and mixed with their feed twice a week, is good. Perhaps you can buy the meal and save the labor of burning and pounding.

**Mites, or Lice, on Chicks—To Prevent.**

To Prevent.—Set your hen in a clean, whitewashed box with new hay or straw. Sprinkle in some common smoking tobacco or a teaspoonful of sulphur. See that your
hen is clean; anoint her under the wings and back of the ears with fresh lard, and when
the chicks hatched and are ready to move, give a new clean nest, made the same way;
give a clean dust bath, and a dry coop; don’t make the hen cover them on the damp
ground at night. If you fear they will get mites or lice take an ounce of vaseline and
mix with it well 20 drops of carbolic acid, and put a little back of their ears and under
their wings.

White Comb.

Appears as small white spots on the sides of the comb of the cock. If examined
the head looks as though sprinkled with meal. Cure:

Cocoanut oil ......................................... 2 ozs.
Tumerick, powdered ................................. ¼ oz.

Make an ointment and apply four or five times.

Chicken Cholera—Successful Remedies.

It has become a well-settled fact that if chickens have warm and dry, but well
ventilated houses, of a size to correspond with the number kept, with their dust-baths,
are properly fed, and have free access to pure water daily, with ordinary care, they will
hardly ever have cholera or other diseases. Then, if it begins, see in which of these
points you have failed, and correct it at once. And

No. 1.

It has always been found that onions chopped and put into the food once a day
for several days, then once a week, and also ground ginger, a little (I should say as
freely as they would eat it) in their meal at their next feeding, every day or two will
cure cholera; then I claim they—the onions and ginger—will prevent it, if fed occasion-
ally, when it is known to be prevalent in a neighborhood. A writer says: “Raw
onions and a very little ginger against the world for curing cholera, if the disease has
not been allowed to run too far.” and adds, “too much whole corn we have found in-
jurious; it should be in meal, and only given once in three or four days in hot weather.”

No. 2.

Common red pepper, or cayenne pepper, one teaspoonful in a quart of milk, or a
quart of meal, says Mrs. J. E. Duvall of Jamestown, Pa., “is the way I cured mine.”
I know the cayenne and the ginger are both valuable in cholera, or looseness of the
bowels, of persons, why not with these smaller animals? It must so prove. A poultry
fancier (one who has a special liking for raising poultry) “cures chicken cholera by
feeding, every other day for two weeks, bran mash, in which he puts a liberal dose of
common red pepper.” One old biddy, he says, “was determined to die, crouched in an
out-of-the-way spot, but I sought her out, gave her a whole pepper in doses one hour a
part, kept her in a warm place, and she, in a few days, gave me notice she could take
care of herself.”

No. 3.

“Hog’s lard,” another one claims. “cold, in doses of one level tablespoonful to a
fowl, and if not better, repeated in twenty-four hours, is a tried and true remedy, and
will cure if anything in creation will cure.”
No. 4.

Alum and copperas is now claimed to be a well tested remedy for chicken cholera, given in the following manner: At the first symptoms (dropping and looseness) dissolve one teaspoonful of each, for each gallon of drinking water, and at the same time give daily, in the soft feed, a little sharp sand at the rate of one teaspoonful to each fowl. In severe cases give at once, by hand, mixed in a little dough, a piece of alum and copperas, each the size of a pea, and also mix a teaspoonful of sand with a little meal and water, for the fowl. Continue the medicated water and sanded feed until all signs of the disease disappear."

No. 5.

| Lard melted | 1 pt. |
| Turpentine | 1 oz. |
| Dough (flour) | 1 pt. |

Mix and feed to one dozen chickens twice a day.

Gapes in Poultry—Cause and Successful Remedies.

Cause.—"Although this disease is believed to be contagious and epidemic, i. e., one catches it from another, and it is liable to affect a whole neighborhood, yet it is claimed to originate from foul water, exposure to wet, and a want of nourishing food. Then look out that none of these are allowed, and avoid gapes. The gapes are caused by fine red worms or maggots in the heart and trachea, or wind pipe, which makes them gape, or perhaps, more correctly speaking, to gasp for breath."

No. 1.

Remedies.—Camphor spirits. 1 or 2 teaspoonful to 1 qt. of their drinking water at the commencement may prove all that is needed; but if any become bad, a bit of camphor gum the size of a grain of wheat, for a chick, and of a small pea for an older fowl, put into the throat and retained there until swallowed, is claimed to be a "sure cure;" but a teaspoonful of camphor spirits should also be put into each quart of their drinking water.

No. 2 For Gapes.

Turpentine—Smoking them by putting the lot into a box or boxes, with a pan of live coals in it, upon which sprinkle fine cut tobacco, covering up the box and smoking them till drunk. Says B. L. Scott in the Blade, "I will warrant every chicken."

No. 3.

Salt butter has cured bad cases given in the morning while they are hungry they will eat readily. If too sick to eat put some down the first time, the next morning they will eat it of themselves. Giving two or three times will generally be sufficient. This, with pepper, is recommended below.

No. 4.

Black Pepper—A Mrs. M. D. Bush of Saline, Mich., informs the Detroit Post and Tribune: "Obtaining the grain pepper and grinding it, one teaspoonful is mixed in a half teaspoonful of Indian meal with a little water. Open the chicken's mouth, drop in one pill of it per day till cured. One dose will usually cure them if given when first taken."
No. 5.

Take a small goose quill and strip off feathers to within a half inch of the end. Dip in turpentine and pass carefully down into the windpipe which is easily seen at the base of the tongue. Give one or two quick turns and remove at once. It kills the worms and the fowl coughs them up. To prevent, give wheat soaked in turpentine.

Pip.

Symptoms.—Tongue is coated with a dry, hornv scale, beak is yellow at base, feathers ruffled, no appetite, and more or less fever.

Cure.—Apply to the tongue with a brush or small sponge, a little borax dissolved in water with a little tincture of myrrh added.

Roup—Cure with Aconite.

The Canada Poultry Chronicle says: "When the fowl is attacked with the characteristic cough of this malady, or has tenacious mucus about the beak with difficulty of breathing, I place it in a wicker coop, in a quiet shed, and put before it a drinking fountain containing about a gill (4 ozs.) of water with which I have mixed one drop of tincture of aconite. In every instance during three years, this treatment has had an effect almost marvelous, for upon visiting the patient an hour or two afterwards, I have found that the symptoms had vanished. The attack for a day or two is liable to return, yet each time in a lighter form, but continuing the aconite water has in no instance with us failed to completely remove the ailment in about forty-eight hours."

Remarks.—If so bad when found, that they will not drink, pour a teaspoonful of the aconite water down the throat occasionally, once in an hour or two, until they can drink it.

Scaly Legs of Poultry.

Mix equal parts of lard and kerosine oil into a paste, with sulphur, and rub upon the legs daily until the scabs come off, then rub on a little sweet oil or a little lard or fresh butter.

Egg-Eating Hens—Simple but Certain Remedy For.

Make an opening into the large end of an egg and let out the contents, beat it up and mix into it enough mustard to re-fill it, and paste on a bit of cloth to keep it in; then place it where the egg-eaters can see and get at it. It is too much for them. And as they take it for granted that all the eggs are alike, they give up the habit. I cannot see why it would not be as good for egg-eating dogs as for hens.

Eggs—To Keep.

The general principle is to exclude the air, to put in a cool place and in dry material. Start with sound eggs only. Decay once begun be it ever so slight keeps on. All the following are good:

No. 1.

Grease the eggs well in fresh salt butter and pack in very dry bran, in layers, with the small end down. Heat your bran in the oven. Any oil will do, but salt but-
ter, if fresh, is better, and it takes but a little. The eggs, if in a cool place, will keep
eight months. You may use salt in place of bran, and they will keep seven months.
The salt can be fed to stock afterward, so it won't be wasted.

No. 2.

Beat up the whites of fresh eggs with a little salt. Paint the eggs with this mus-
cilage and pack in dry bran; put away in a cool place, and six months after they will
be equal to fresh.

No. 3.

| Boiling water | 12 qts. |
| Freshly slacked lime | 1 pt. |
| Salt | 1 pt. |

Mix well. Let stand for three days in a cool place. Fill your keg or barrel half
full with fluid of this strength. Then put your eggs down in it. It is said they will
keep two years.

No. 4.

Pack in finely powdered, very dry, gypsum (Plaster of Paris) as in No. 1.

Poultry—The average of Different Breeds as Layers.

Table, with remarks upon, Best Setters, Mothers, Winter Layers, etc. Experi-
ments have shown the following to be about the average laying capacity of the different
breeds, yearly, and the weight of eggs to the pound:

| BRED | | | |
|------|---|---|
| Light Brahmas and Patridge Cochins | 7 | 130 |
| Dark Brahmas | 2 | 130 |
| Black, White and Buff Cochins. | 7 | 115 |
| Plymouth Rocks | 8 | 150 |
| Houdans | 4 | 150 |
| La Fleche | 5 | 150 |
| Creve Coeurs | 5 | 140 |
| Black Spanish | 7 | 140 |
| Leghorns | 6 | 160 |
| Hamburgs | 9 | 150 |
| Polish | 9 | 125 |
| Dominiques | 9 | 135 |
| Games | 9 | 130 |
| Bantams | 16 | 90 |

To Prevent Your Hens from Getting Bumble Feet.

Let their roosts be made of slats 2 or 2 2/1 inches wide, and be not over three feet
high in front, and rise with each perch gradually back. Keep them out of the cold and
freezing wet ground.