

below it, and weak and low, the following drink may be ventured on; but No. 1 must be returned to if there is the slightest appearance or increase of cold or fever.

Recipe, No. 3.—Take emetic tartar, half a drachm; nitre, two drachms; powdered gentian root, one drachm; powdered camomile flowers, one drachm; and powdered ginger, half a drachm. Pour upon them a pint of boiling ale, and give the infusion when nearly cold.

When the beast begins to recover, he should not be exposed in any bleak situation, or to much rough weather.

In some years this epidemic disease destroys a great many cattle. In the winter of 1830, and in the spring of 1831, thousands of young cattle perished in every part of the country. Some of them were carefully examined after death, and the membrane lining the windpipe was found to be inflamed, and the inflammation extending down to and involving all the small passages leading to the air-cells of the lungs.

In a great many instances the windpipe was nearly filled, and the small passages of the lungs were absolutely choked by myriads of little worms. These cattle had had their flanks particularly tucked up, and had stood and coughed with a violence that threatened every moment to burst some blood-vessel; and well they might cough thus violently, when the delicate and sensitive lining of the air-tubes was incessantly irritated by the motion, if not by the bites, of these worms. The origin of the worms no one has satisfactorily ascertained. There is no doubt that there are innumerable little eggs of various animalcules, too small to be seen by the unassisted eye, always floating in the air, and only waiting for some proper situation or nest in order to be nursed into life. The proper nidus or nest of these animals is probably the mucus of the air-passages, and they are plentifully lodged upon it in the act of respiration.

I scarcely know what to advise in the treatment of these aggravated cases. The violent cough is an effort of nature to expel the parasites. Can we assist her in accomplishing that expulsion? There are certain medicines which afford us much relief when we have difficulty in expectorating a quantity of thick viscid phlegm. After a dose or two of liquorice or squills we find the cough considerably loosened, or, in other words, the phlegm is a great deal more fluid, and easily got rid of. The same effect, although not to such an extent, is produced in cattle, and a few, at least, of the worms are expelled. The following prescription may be tried with advantage:—

Recipe, No. 4.—*Expectorant Drink.*—Take liquorice root, two ounces; bruise, and boil in a quart of water until the fluid is reduced to a pint; then gradually and carefully add—powdered squills, two drachms; powdered gum guaiacum, one drachm; tincture of balsam of Tolu, half an ounce; honey two ounces. Give it morning and night.

There is another way in which the worms may with greater certainty be got rid of. There are some substances which are immediately destructive to worms

when brought into contact with them. Some of these medicaments may be taken into the circulation of the animal with perfect safety to him, and probably death to the worms. Among those which must readily enter into the circulation after being swallowed is the oil or spirit of turpentine. The breath is very soon afterwards tainted with its smell, which shows that a portion of it has passed into the lungs. Therefore, when other means have failed, and the continuance of the violent cough renders it extremely probable that worms are in the air passages, the following prescription may be resorted to:—

Recipe, No. 5.—*Turpentine Drink for Worms.*—Take oil of turpentine, two ounces; sweet spirit of nitre, one ounce; laudanum, half an ounce; linseed oil, four ounces. Mix and give in a pint of gruel.

This may be repeated every morning without the slightest danger; and even when we are a little afraid to give it longer by the mouth, it may be thrown up in the form of an injection. A pint of lime water every morning, and two table spoonfuls of salt every afternoon, have also been administered with advantage when worms are present in the windpipe.

Before I quit the subject of hoose, I must repeat my caution against the use of spices and cordials for the cure of this disease. Hundreds of animals are yearly lost by this mode of treatment. As easily may a fire be put out by pouring oil upon it, as hoose, attended with fever (and it is so attended nine times out of ten), be subdued by the farrier's comfortable, or, in other words, highly stimulating, and almost intoxicating drink.

Should the case appear to be obstinate, the exhibition of half doses of physic every second or third day will often be useful, with the following drink morning and night, on each of the intermediate days:—

Recipe, No. 6.—Take digitalis, one scruple; emetic tartar, half a drachm; nitre, three drachms; powdered squills, one drachm; opium, one scruple. Mix, and give with a pint of gruel.

A seton in the dewlap should never be omitted; and if the disease seems to be degenerating into inflammation of the lungs, the treatment must be correspondingly active.

The termination of hoose that is most to be feared is consumption. That will be indicated when the discharge from the nose becomes purulent, or bloody, and the breath stinking, and the cough continues to be violent, while the beast feeds badly, and the eyes begin to appear sunk in the head, and he rapidly loses flesh. The best remedy here, so far as both the owner and the animal are concerned, is the pole-axe of the butcher; for in the early part of disease the meat is not at all injured, and may be honestly sold. If, however, it is wished that an attempt should be made to save the animal, the cough and fever drink (No. 1, p. 46) may be given daily; more attention should be paid to the warmth and comfort of the beast; and, if the weather is favourable, it should, after a while, be turned into a salt marsh, either entirely, or during the day.

FALL GRAFTING.

Hitherto, says the Maine Farmer, the spring has been considered the only time suitable for grafting, and the summer for budding or inoculating trees. An old serving-man of Neptune, residing in Beverly, Ms., (Capt. Josiah Leavitt) having ploughed the ocean to his heart's content, thought he would try ploughing the land a little by way of change, and has hit upon a plan of fall grafting with good success.

The following is an extract from his communication, in Hovey's Magazine of Horticulture, upon the subject:—

"Your remarks in the November number of the Magazine, for 1843, page 433, respecting my mode of procuring the specimens of fruit presented on several occasions at the Horticultural Society's rooms, last autumn, is partly incorrect; they were not procured by budding, but by grafting. I have practiced budding with fruit buds for eight years past, occasionally succeeded in getting good fruit from them. It is not three years since I began grafting with fruit wood in autumn, (and I never heard of any person attempting it previous to that time,) thus far I have been eminently successful with the pear and apple (occasionally with the plum;) the grafts thus set have been more certain to mature their fruit, than the trees from which the grafts were cut; this can only be accounted for by supposing the sap to flow slower in the graft in the spring in consequence of their not having been a perfect union with the stock in autumn; now, the grafts not blooming or setting their fruit quite as early in the tree from which they were cut, escape the injurious effects of our late spring frosts and cold north-east storms, to which, in our climate, we are so subject.

I select a healthy shoot for a scion, with fruit buds on it, (I have set them a foot long with one or two side shoots.) Immediately remove the leaves, and cut it on one side in a sloping direction, to a point, then cut from one to two inches long; then with a sharp knife I began at the point and cut just within the bark, up about half an inch above the commencement of the incision on the opposite side; then select a thrifty, upright shoot, on a healthy tree, cutting well back, making a short stump; cut this stump in the same manner as the scion, reverse it, and carefully but firmly push one within the other; secure with bass or Russia matting, and cover with clay; or, I prefer to mix equal parts of bees wax and Burgundy pitch (a less quantity of rosin will answer in room of pitch;) soften to a proper consistency with hogs lard, melt together, and spread on coarse cotton shirting; then cut in stripes of one half to three quarters of an inch wide, and after uniting graft and stock, bind with this the cotton side next the bark. The composition ought not to come in contact with the bark as the bandage should be left on through the winter. If the grafts are carried any distance before uniting to the stock, it will be very important, that the leaves are all cut off under the tree, and the ends, as soon as possible, dipped in wax or something adhesive.

Very respectfully, your obedient servant,
JOSIAH LEAVITT, 2J.

Beverly, March 5, 1744.

N.B.—The mode of grafting above described is very similar to what is called whip-grafting by some, though I take much less wood with the bark than I have seen gentlemen do who graft by that mode.

The Bite of a Rattlesnake.—The most simple and convenient remedy, says a correspondent of the Macon Messenger, I ever heard of, was alum. A piece the size of a hickory nut, dissolved in water and drank or chewed and swallowed, is sufficient. I have a good authority for saying it has been tried many times, on men and dogs, and that they have invariably recovered. I know of some planters whose hands are exposed to be bitten by rattlesnakes, who always have them provided with it, in their pockets, and they have several times found use for it.