

an active nature. Bleed by general abstraction, that is, from the jugular vein, to the extent of from four to six quarts, following up immediately after by the administration of a strong purgative, in the shape of a ball composed of Aloes Barb, eight drachms; Ginger, one drachm; made up with a little lard. Throw up injections of soft soap and tepid water three or four times a day. The physic having set, and your seeing any occasion for it, you may abstract a small quantity more of blood. Blister the sides as far forward as the place of girthing. One fact must be born in mind when treating this disease, and that is not to administer Calomel or any of the preparations of Mercury, they being powerful stimulants to the liver, and must be avoided. Give a drench night and morning composed of Liquor Potassi, two drachms; Iodide of Potassium, half a drachm; in a pint of cold water, and if the symptoms gradually subside to the above mode of treatment, and upon the whole you find the case progressing favorably, give the usual tonic powder, or ball which is a much better and more convenient way of administering nearly all the different classes of medicines to the horse, providing the ball is carefully compounded and neatly enveloped in thin paper. But that disgusting mode of giving balls should be carefully eschewed, namely: by rolling rosin and salt-petre in lard, and placing it in the horse's Molar Teeth or Grinders, causing nausea or sickness to a greater or lesser extent.

Rupture of the liver occasionally occurs from distention, some undue effort of the respiration, bodily exertion, an injury.

SYMPTOMS.—The horse becomes very dejected, loosing his appetite, and evincing excessive pain if made to move; he will make two inspirations to the one expiration; the membranes of the eye, mouth, and nostrils, become pallid, pulse small and quick, and it will be found almost impossible to feel the artery at the jaw. Cold sweats break out all over the body, staggering in his walk, falling in the stall, and convulsions supervening.

TREATMENT.—Apply cold water or ice to the right side, throw up cold water injections, small doses of styptic medicines must now be given, and some of the preparations of iron must now be brought into use with a view to their administration; also keep the animal as quiet as circumstances will permit.

Worms or Hydatids are sometimes found in the biliary ducts or passages of the liver.

Biliary Calculi or Bile Stones have sometimes been found in the liver of the horse, but of rare occurrence.

In my next I will drop a few lines upon an important organ in the abdominal cavity.

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To the Editor of the Farmer's Advocate.

How to Prune Grape Vines and When to do it.



FIG. 1.

Every grape vine requires four prunings during the year. It doesn't matter whether or the Spur or Revival system. I now propose to give the first three years' treatment, as illustrated in the subjoined cuts. Select strong plants, as in Fig. 1, and as soon as planted prune back to a strong bud, as in Fig. 2 and support the young cane as they spring up, by any kind of a stake four or five feet long, as in Fig. 4. This will answer for three years, until the permanent trellis is required. Shorten all laterals or side shoots back to one joint from the leader, as in Fig. 1, leaving a leaf on it. This is called the first spur, as in letter A B C, dotted line, Fig. 1. Be sure and not hurt the tendrils. The second and third pruning is similar, shortening laterals after making five or six joints, leaving spur upon spur, and a leaf upon each spur as well as leader. In the last or Winter Pruning, cut all the leaders back, as in Fig. 2, and take off the spurs and tendrils. If it is a tender variety lay them down for protection, covering them with asparagus tops or straw litter.

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FIG. 2.

SECOND YEAR'S TREATMENT.

As the buds push out, train them up as in Fig. 1; these are the leaders. Sprig them occasionally when the sun is off, with clear water. If there is any weak ones, rub them off as in Fig. 3. As soon as the laterals are long enough, shorten them as in Fig. 1, and so on as in the first year's treatment; after the leaves are off the vine will be as in Fig. 4. Commence the winter pruning as in Fig. 4, a a a; you see the spurs; take them all off and shorten the leaders back to a strong bud. Protect them, if tender, as before.

FIG. 3.

THIRD YEAR'S TREATMENT.

You will now get fruit, and every year after if properly treated. The permanent trellis may now be erected of oak scantling, 4 ft. by 4 ft. and 7 ft. long, for posts, about 7 feet apart as in Fig. 5. Put two and a half feet in the ground, this part charred or burned a little. Nail slats or put wire across them to train the vines on. If on the Revival system, train up every alternate leader, and strip the fruit from it to make it strong, looking after the laterals, as in Fig. 1, through the summer. The remaining leaders to be shortened one or two joints above the last



FIG. 4.

bunch of fruit, with a leaf on each joint, and one beyond the last bunch of fruit, looking after the tendrils as before. If on the spur system, allow the whole of the leaders to bear a few of the strongest bunches, cutting the weak ones off, pruning back the leader to the last bunch of fruit, as before, looking after the laterals through the summer, as in Fig. 1, so as to mature the leader bud for the next year's fruit, as in Fig. 7.



FIG. 7.

This shows a bulbous bud, composed of three buds, the centre one being the fruit bud as in letter d, first crown bud; c, second crown bud; e, third or fruitless bud. Each leader bud contains this number when properly matured. Care should be taken not to injure the first bud. The summer pruning is very necessary to bring this leader bud to maturity, as the laterals would rob it and make it weak while the spurs feed and make it grow bulbous; but if you take out the lateral altogether and not leave any spur, all the sap will flow into this bud and make it grow out a year before its time, destroying its prospects for the coming year.

The last or winter pruning on the Spur System, the two canes a a must be cut out as in dotted line Fig. 5, the other five back to a strong bud as at c c b b and a a, if the buds are strong enough—if not, go to a strong bud. If on the Renewal system, as in Fig. 6, a a b b b, all vines ought to

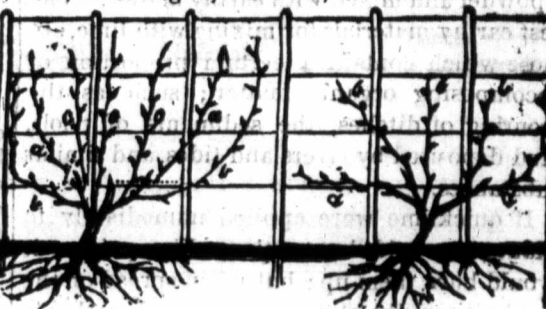


FIG. 5.

FIG. 6.

get their winter pruning before the last week in March, as they will bleed and often die. If, by accident you break a branch or cut any part so as to bleed, put a raw potato on the wound which will stop it effectually.

Any one growing grapes extensively, would find it to their advantage to go any distance to see each pruning done and have it explained, or pay an experienced hand. I would beg leave to call the attention of vintyardists and amateurs to the points here explained, believing them to be the only method in successful culture of the Grape Vine for their permanent prosperity and fruitfulness.

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To the Editor of the Farmer's Advocate.

MINERAL MANURES.

LIME.—It is well known that various substances belonging to the mineral kingdom, are capable of promoting the growth of plants. These substances have been termed stimulating manures, in contradistinction to manure derived from the animal and vegetable kingdom, which are called nutritive manures. This distinction, however, was applied before it was known that mineral substances are nutritive,