

its body is impervious to fluids—non-absorbing—insensible, composed of bristles in rows, and intermediate tissue, identical in structure with that of the claws of birds, and nails of man; in fact the bot will live for some time in strong acids; they may be kept in proof spirits for weeks, and even months has not sufficed to destroy them; they will, then, on being washed and exposed to the sun's rays, give evidence of vitality.

It was formerly thought that the bots were capable of perforating the walls of the stomach; but this opinion is now generally exploded. They do not possess the means, if they had the inclination to bore through the stomach. Yet as some wonderful stories are often, at the present period, related of bots burrowing through the stomach, it may be proper for me to refer to that subject.

The stomach of a horse is the nursery and home of the bot, its natural habitation, here it generally remains during its minority, or until it is fully developed and capable of exercising an independent existence, or of undergoing metamorphosis into the gadfly. Destined therefore by the law of nature; which localises all equine parasites to their respective tissues and organs, out of which they are very seldom found, and then merely by accident; the little creature is too comfortably ensconced ever to attempt an escape through the stomach into the abdominal cavity, where it would be out of its element; if the period has arrived for the bot to vacate its stronghold it chooses the safest and ordinary route, which is through the alimentary canal—intestines. The month of May is usually the period of their maturity; at this season the horse being at grass the bots will leave him.

Bots are occasionally found in the abdominal cavity, but if the stomach of the dead horse be carefully examined, it will be found to have been ruptured, either as a consequence of disease—ulceration—or from over distension by gas. Very many cases of flatulent colic terminate in rupture of the stomach, or from decomposition.—*American Farmer.*

CULTURE OF THE TOMATO.

Every one who plants a garden must have experience of the difficulty of dealing with tomatoes as usually grown; they spread over space where they are not wanted; they hug the ground with such persistence that nothing can keep them from it; they rot both when it rains and when it does not rain; and at about the end of September they come to an absolute end of all production. The consequence is that most people choose to purchase such as the market affords, and to pay for defective and unsatisfactory tomatoes at a high price because an ordinary garden does not afford room for them. Having gone through an ample experience of this sort, I by accident at

tempted a mode of cultivation two years ago which has far exceeded my expectations in obviating the difficulties referred to, and in giving an ample supply of tomatoes so far superior to those usually sold, as to bear no comparison with them.

This mode is a right training of the vines on a high wall—a wall facing south in my case, but one facing east I think will do, while one facing north certainly will not do. Strips of lath nailed on posts or stakes, say eight inches from the surface of the wall, suffice to keep the vines within the inclosed space, but they must also be frequently tied to the lath, or to nails driven in the face of the wall. Some trouble is requisite when they are growing most rapidly, but it will repay all the trouble well; being sure to keep the vines from falling or blowing down by whatever driving—tying or lath—may be necessary I have had no serious difficulty in this respect, nor will anyone who ties the vines frequently in July and August: using some soft flax twine, or strong cotton strings.

The result is that the vines grow and bear from the earliest time that any can be produced, until absolutely freezing weather comes in November. I have had them in profusion and in perfection on the vines in two years as late as the middle of November—the fall of 1865 and 1866 being favorable as regards late frosts, or the delay of absolute freezing weather. And it is remarkable that the tomato plant under such circumstances continue to produce as abundantly to the last as could be desired, without check by any frost or chill that does not absolutely freeze the vines.

The fruit of the tomato is peculiarly an air fruit, requiring the fullest sun, and the most free circulation of air to perfect it. In the shade or near the earth the fruit does not set, and if set, does not ripen. Under the best conditions for the vines in this respect the production is so much greater as to pay for all the trouble of attaining them, even if a wall or trellis were to be erected exclusively to produce tomatoes. And those growing them for market purposes would be as well repaid as private cultivators. I can count up already about eight bushels as the produce of sixty feet of wall, and but twelve inches of earth surface at the foot in which they are planted, a brick wall three feet in width coming next. The vines have in three cases ripened fruit largely at a height of six to seven feet, and the bearing season has begun, or the production of ripe tomatoes, about the 10th of August.

As every practical economy in producing this indispensable vegetable is really demanded to secure good fruit and enough of it, I trust some of your readers who have been annoyed as I have been by the old mode, will try the wall; and by a little expenditure of labor, secure a result

practically ten times as great in this item of private gardening.—[*Gardner's Monthly.*]

EARLY CUT WHEAT.

I had always supposed that wheat, like nearly all other grain, should be ripe when harvested. I have noticed and read many arguments in favor of reaping wheat when the kernels are quite soft, claiming that the wheat would weigh heavier, and the yield of flour be greater and of a better quality. This seemed strange to me. But proof from my own experience has convinced me that not only heavier kernels and more flour is the result, but that there is less waste in harvesting, and a better quality of straw is obtained.

As wheat was slow in ripening, owing to the wet spring, making it some ten days later than usual, the farmers in general were ready and waiting for the grain to ripen. After waiting beyond the usual time, and haying all done up, I put in the reaper, hesitating and fearing loss from so great a share of soft kernels. By inquiry I found that many others were in the same predicament. We bound as fast as cut, having a full set of hands. One field of eighteen acres was on rolling land, and ripened earlier. The other field, of eleven acres, on level land and sown but two days later than the first, and with the same kind of seed, was fully one week later in ripening. I did not wish to dismiss my hands, though paying \$2.50 a day. Fully three-fourths of the kernels were so soft that they could be easily marked between the fingers. But few straws were yellow just below the heads. The weather being fine, I concluded to test the matter. The field was reaped, and the wheat shocked in less than a day. After standing some ten days it was stacked, and threshed in September.

RESULTS.—To test the matter fully, I took eight bushels to mill and requested the miller to weigh before and after grinding. Weight of wheat, 61 lbs. per bushel; toll 7½ lbs. (one-eighth for toll is law in Illinois;) flour, 41½ lbs.; shorts and bran, 12½ lbs. Sold one load in market at 8 cents above the ruling price at the time.

Hereafter, if I am ready to begin, I shall cut wheat before the kernels are ripe or hard. I made careful inquiries of the miller why the yield of flour was so much more than I usually got from his mill. His reply was that the bran, on early cut wheat, was tougher, and would allow the mill stones to be put closer together. If allowed to stand until fully ripe when cut, the bran would be more tender, and consequently mix more with the flour in grinding. The variety grown by me is the Siberian, and is judged to be the best kind raised in this vicinity. G. G. TAYLOR,—

COUNTRY GENTLEMAN.