

The Late Dr. T. B. Hamlin.

It is a painful duty to announce the death of so prominent an apiculturist as Dr. T. B. Hamlin, - one who as a friend was so highly esteemed by all who knew him. This sad event occurred at his residence, near Edgelfield Junction, Tennessee, on the 24th of last May.

Dr. Hamlin was born at Red Hook, on the Hudson River, N. Y. in June, 1810. At the age of sixteen he was left with no near relatives and but little education. His prominent position and financial success in life are wholly due to his own indomitable energy and perseverance, combined with his uprightness of character. At about eighteen he was foreman of the largest watchmaking establishment in Albany, N. Y. and probably the largest in the United States. After preparation in dentistry at Albany and while watchmaking in Lee, Mass., he commenced the practice of that profession in Virginia. While there he took an active part in the organization of the first dental association known in the world. He afterwards removed to Alabama and thence to Nashville, Tenn., where for twenty-five years he followed his profession with eminent success.

More than forty years ago the young watchmaker of Albany, shortly after his marriage in Lee, Mass., where he had established in watchmaking, commenced the keeping of bees. This last named occupation was continued for many years thereafter in connection with his profession as a dentist. In 1861 his health, which had failed early in life, became quite poor, and he gave up the practice of dentistry and repaired to the sea-coast at Newport, R. I. At the close of the war D. Hamlin returned to Tennessee and devoted his whole attention to bee culture and the nursery business. The extensive business of the "Cumberland Nurseries" which he established in connection with Mr. B. B. Barnum—a practical nurseryman, was conducted mainly by the latter, while he devoted his attention almost wholly to the apiculture. He was the first to introduce the Langstroth movable comb hive and the improved methods of bee culture in the South, and to engage in the importation and rearing of Italian bees, which he did extensively, and aided in their introduction throughout the United States. He assisted greatly in establishing the "Tennessee Apian Society," of which he was President, and also, the "National Bee-Keepers' Association," being Vice President of the latter at the time of his death. His interest and enterprise in the promulgation of apian knowledge, especially in the South, are worthy the highest encomiums. His own success in increasing his bees from a few colonies to over three hundred, and continually getting large returns from them, furnishes a practical proof of the reliability of his teachings. His little work on bee culture has wrought a great change in the manner of keeping bees in many localities here.

Dr. Hamlin's marked energy of character, his perseverance, his lofty aspirations after perfection and his kindness and affection as a husband, a father, and a friend are well worthy of imitation. An upright, zealous member of the Church, a prominent leader in the masonic fraternity, held in high appreciation by the members of his profession, and an enthusiastic master of apiculture, he is mourned by a large circle of friends and relatives, who alone are comforted by the knowledge that he so lived that

"When the summons came to join
The innumerable caravan that moves
To the mysterious realms, where each shall take
His chamber in the silent halls of death,
He went, not like the young slave, at night,
Scourged to his dungeon; but, sustained and soothed
By an unfaltering trust in God, he approached his grave
Like one that draws the drapery of his couch
About him, and lies down to pleasant dreams."

FRANK BENTON.

Edgelfield Junction, Tenn.

Comparative Bee-Keeping.

Reports of extra large yields of honey, together with the often fraudulent representations of patent hive venders, have induced many of our farmers to invest in bees and patent hives, with expectations of large profits. Many are disappointed, and not a few really disgusted with the result. The cause is attributed to poor hives, bad luck, dysentery, or poor seasons; while the real cause of failure is due to want of proper care, and practical knowledge of the requirements of the bees themselves. Bee-pasturage varies in different localities perhaps as much as pasturage for sheep. Yet no farmer could be made to believe that wool growing did not pay, because it was necessary at times to provide provender for his sheep, or because they were subject to scab, foot-rot and pneumonia. The acquisition of sudden wealth in bees, as well as in other farm operations, is per-

haps as uncertain as a fortunate investment in a lottery. Yet that bee-keeping can be made to pay a fair remunerative income on the investment, I will proceed to show from figures deduced from an actual account kept for five years, in a poor locality, and without any previous practical knowledge of the business. Profits for 1869, a good season, 100 per cent.; 1870, 50 per cent.; 1871, 200 per cent.; 1872, 30 per cent.; 1873, 200 per cent. The winter of '72-3 was perhaps the most disastrous to bees ever known. But like disasters have frequently befallen other branches of farm industries. My wheat crop failed to pay for actual labor performed. Fruit also was a failure. Peach trees were killed by the hard winter.

Hogs have sold for less than value of corn fed in fattening. Cattle brought less than cost of raising. Poultry could be had for less than value of food fed them. Yet all required as much care as if sold at a profit. We would, however, think that farmer very unwise who would quit the raising of live stock or grain, because of low prices, or severe winters. If bee-keeping farmers would use as much precaution in preparing pasturage and shelter for their bees as they do for their live stock, I doubt not that a few years of experience, backed with a comparative table of facts and figures, would convince them that bee-keeping would prove as remunerative as any business in which they are engaged. The man who expects a large crop of fine fruit each year, without pruning or cultivating his orchard; he who hopes to harvest a heavy crop of wheat, corn, or oats, without properly ploughing and pulverizing the soil; he who expects to cut a heavy swath of hay, every year, from a meadow which he devotes half the year to pasturage; and the bee-keeper who expects to get a large yield of honey without giving his bees any attention whatever, are all sure to be disappointed with their business, and will declare "It don't pay."

I have known men to buy an improved hive and patent right at a high price, and had not means enough to pay 25 cents for a book or paper giving instructions on bees and their management, and even "had not the time to read" a book furnished them. They surely will say "bee-keeping don't pay"—*Cor. Bee-keeper's Magazine.*

How to make a Bee Hive.

Take an inch plank, (let it be smooth) 28 x 18 inches square, for the bottom; saw out of the centre a piece 6 inches square; cover this with wire cloth. Make a slide for the under side, so as to give ventilation, according to the weather. Let side pieces be same length, 12 inches wide, and set these on the bottom. Nail from the under side, letting one be one inch from the edge (This is for the bees to have a place to light on.) Make an entrance under this for the bees to go in. Take strips, two inches wide, and nail on the outside at top on side board, extending above one inch. Hang the frames inside of this on top of side board. For frames take strips 3 x 1 1/2 wide, ten inches long; for the end pieces, for bottom and top, one inch wide; bottom piece, 15 inches long, top piece, 2 inches longer, extending 1 inch over each end piece when nailed together. Nail through the top into the end and through the end into the bottom piece. For a guide take a triangular piece, tack it on the under side of the top piece. Cut out end boards 12 1/2 inches wide, and hang on just like the frames.

Next is a covering for the top; put this on with hinges, on the front side, and fasten on the other with a latch, or a weight on top will do. When complete, frames should be 3/4 of an inch smaller than the hive inside, giving room for the bees to pass around. When you wish to open this hive, unfasten the latch, raise the lid, slip off the end boards, and all is open to inspection.

To put a swarm in this hive, raise the lid, put one end board in place, then seven frames, and then the other end board. Put a board or cloth on top of frame, raise up one end board 3 inches, empty the bees as close to this opening as you can. When they all go in, let down end board, take board or cloth off of frames, let down the lid, and you have them. As they fill up put in more frames. You can make frames larger or smaller according to your fancy. The principle is the same as Mr. M. Quimby's, but differently constructed.—*Cor. Prairie Farmer.*

HEARING OF BEES.—Naturalists have always differed in opinion on this subject. Aristotle doubted whether they could hear; Linnæus and Bonnet denied that they could; Huber was undecided; Kirby and Spence affirmed that they could, and placed the organ in the antennæ. Other naturalists affirmed and denied. The evidence is strongly in favor of the affirmative.

THE word honey is undoubtedly derived from the Hebrew *ghoney*, which means delight; an appropriate name.

YOUNG BEES come to maturity from two to four days sooner in California than in Pennsylvania.—*Harrison.*

NO OTHER branch of industry can be named in which there need be so little loss of material employed, or which so completely derives its profits from the vast and exhaustless domains of nature, as bee culture.

PURITY OF ITALIAN BEES.—A bee-keeper says that the purity of Italian bees is determined by noting that the worker bees have three distinct yellow bands, and the drones are distinctly marked with yellow on their backs and sides.—*Rural New Yorker.*

THE best districts for bees are those from which the timber has not been removed. The yield of honey in the mountainous part of Kentucky, is more abundant than in the blue grass region, where white clover abounds, which has generally been supposed to be one of the best honey plants, but which has proved of late years unreliable.

Entomological Department.

Insect Ravages.

In the great war against weeds we are in danger of forgetting that we have an enemy about of far greater power, because working often insidiously and unseen, which requires to be as much guarded against, namely, the insect enemy. We complain of weeds because they rob the plants of food, and like the place where a good plant ought to be; and we fight with the feathered enemy because he takes the fruit which has struggled through all other troubles; but the insect which we do not see rarely troubles us very much, though after it is too late to apply a remedy we see what terrible havoc has been done. Then, overwhelmed with our great loss, we think there is no help for it,—that it is one of those wise dispensations of Providence which, like the measles or small-pox, we cannot escape from, but which we had better patiently endure if not actually embrace. Yet we have the evidence everywhere about us that much less labor than is often expended by the exasperated farmer or fruit-grower in shooting birds that are rather his friends than his enemies, would be more than sufficient to preserve a fruit-crop against the worst insect enemies that ever existed.

We are moved to these remarks by a communication we recently read in a horticultural journal in regard to the celery-grub. All who have had experience in the culture of this vegetable know that they have much trouble some seasons from the operations of a very small worm, which gets underneath the surface of the leaf and feeds on its green cellular matter. Celery when attacked by this insect rarely does any good. The correspondent had tried lime and ashes, and sulphur, and all the easy remedies so often named, but with no good at all. Finally he wrote, as every good subscriber does, to "his paper," and was told to go over the leaves on the first appearance of the insect and pinch them "dead." He thought this very absurd, and compared the advice to the "Irishman's remedy of killing fleas, by putting Scotch snuff on their backs," but he was tempted to try the advice, and found to his surprise that it took no more time than one or two good waterings or weedings, and he therefore writes to thank the editor for his advice, and praise his own good sense in having taken it. Yet this is no more than we in this department, and most other agricultural laborers, are continually inculcating, namely: the necessity of personal labor if we would do anything in this way with much hope of success.

This has been exemplified in the case of the curculio on the plum. All sorts of easy scareweevils have been thought of. Some dust the trees with lime, with sulphur, with ashes—others stick tar in rags about the tree. Numerous other nostrums have been popular, but the first great blow at the curculio, if we remember right, was suggested by Ellwanger & Barry, of New-York, who deliberately employed a man to place sheets under the trees, and with a mallet suddenly jar the trees and thus shake the insects off, which were then taken to a funeral pyre. In this way they have always had plums, and the plums have paid them handsomely. Dr. Hall, of Illinois, improved on this idea. He invented a sort of wheelbarrow with sheets spread on frames, which shook off and collected the insect at once. He also has plums in plenty, and find it pays. It is indeed