and worldly things bind the strong man or still the voice of conscience.

In the same chapter from which I take my text there is a beautiful verse describing the character of Christ Jesus. It should also, dear friends, describe the acting spirit of his followers. Let us read it: "He shall not strive nor cry, neither shall any man hear his voice in the streets." Perhaps some may think I am making too much of a little matter. They may say it is right and proper to test the speed of horses or of wheels. Well, I agree, providing the matter can be managed good-naturedly and without strife. In the contest above, I think my friend lost his temper when I came out and said I would ride a portion of the way. Good-natured while I was the victor. It is easy enough for the man who wins, to look pleasant. When the circumstances were changed, however, and the horse ran ahead of me, I tell you it was a pretty hard tussle for me to give up; but I did, and then found something else to do. She is a cousin of mine, and has the Root blood in her veins. She too is a professing Christian. When I told her about it she declared that, if she had been in my place, she would have gone ahead, if I had half been in that thing; and as I go over the matter and think of it, my blood yet tingles, and one part of my self seems to feel sorry that I gave up: but the better part—the main part and the Christian part—says most emphatically, "Get thee behind me, Satan."

ON THE WAY TO LAKEIDE.

In riding a wheel we need not go over the same ground unless we choose—that is, at a season of the year like this, when the roads are all passable; and I always make it a point to go over the roads not taken another, in order to study the country and see more of God's gifts to his children. As there is an electric railway from Norwalk to Sandusky, I decided to run directly from Medina to Norwalk, and then, if time permitted, to Sandusky to consult my pocket-map I discovered that East Townsend, where H. R. Boardman resides, is a little north of Medina; therefore I took a diagonal bearing northward until I reached a point directly east of East Townsend. Then I selected an east and west road and followed it straight ahead for about 30 miles, and was pleased to find myself right before friend Boardman's door. By consulting the parallels on the map you can follow an east and west road pretty accurately; and I was pleased to find that a cheap pocket-map of Ohio was accurate enough for the purpose, and to find also that our east and west roads are laid out exactly east and west. I started at 7 o'clock, and had made something over 40 miles just as friend R. F. and his brother went another. His pretty home looks just as neat and tidy during our intense drouth as it does at any other time of year: and although he has but little basswood, comparatively, in his locality, he has as much creosote bush as any other two tons of beautiful basswood honey. His bees were fed as usual, so as to have every colony full and strong when the honey flow opened. As the day was very hot, the bees were exceedingly busy taking water from a feeder of his own invention. He uses it for giving them pure water, or for giving them sugar syrup or any thing else he chooses. They are made of half-gallon fruit-jars, on the atmospheric principle. But he has an arrangement so that he can lift any jar out of the water and put it back, without injuring a bee. He also uses it as an entrance feeder, without having any unpleasantness, even though he was feeding thick sugar syrup right during the middle of that hot August day. His crop of honey hangs about head in the pump, the bees. The room, although above ground, is as cool as a cellar, during the heated months of July and August.

After chatting until nearly time for the electric train to leave Norwalk, I started whekel. On reaching there I was informed that the electric car would not receive my wheel unless it happened to be one that had a freight car along with it. I asked what speed they made, and found I could pretty nearly equal it with my wheel, made a remark on the subject and save my money. In all such cases, the simplicity of a wheel commends itself. In coming home on the same route I was informed at the office in Sandusky that it would be an hour and a half between two trains. I was walking; and as 16 miles is not a big ride for that length of time, I found I could make the trip while I was waiting for the car.

Up toward the lakeshore we meet with a serious obstacle to wheeling, in the dry loose sand. By a piece of thoughtlessness I too in a strip of this soft sand for about two miles; and had it not been for the experience and drill that I told you of a year ago in coming from Akron after dark, Saturday night, I fear I should have had to walk the two miles. And, by the way, when I tried hard that night to remember the Sabbath day to keep it holy, I made a big investment that I did not know of. In learning to ride through sand. One who has had little experience would declare the thing to be impossible; but I think I could have walked through almost the worst part of sandy road we have here in Ohio, without getting off my wheel; but it is hard work, and it does not pay unless you happen to get caught. Inquire about, and I can tell you.

I reached Sandusky just as the evening boat was preparing to leave the wharf, making 35 miles in about 7 hours, that being the longest ride I had ever made in one day. I wanted to take the trip to Port Clinton, but could not get to get through almost the worst part of sandy road we have here in Ohio, without getting off my wheel; but it is hard work, and it does not pay unless you happen to get caught. Inquire about, and I can tell you.

I reached Sandusky just as the evening boat was preparing to leave the wharf, making 35 miles in about 7 hours, that being the longest ride I had ever made in one day. I wanted to take the trip to Port Clinton, but could not get to get through almost the worst part of sandy road we have here in Ohio, without getting off my wheel; but it is hard work, and it does not pay unless you happen to get caught. Inquire about, and I can tell you.

Catawba does not seem to be a town—at least, there were no houses except great boarding-houses. They are not hotels, for there is no sign out—at least, I did not see any; and I understand they are mainly for visitors, who use it as a pleasure-resort. There were former
ly great quantities of Catawba grapes raised here; but they are now cutting them out and putting in peach-trees instead. The trees are planted between the rows of grapes, and the latter removed when the trees begin to bear. One of the messengers, who was trying to bind their possessions, they called those peach orchards worth an acre. I guessed two or three hundred dollars. He said the orchards along the lakeshore, in full bearing, were valued at from two to three thousand dollars per acre.Surely, farming does bring in a great and fair profit. Even away back from the coast, he said, the orchards were frequently sold for from five hundred to ten hundred dollars per acre. I supposed that we should, of course, have peaches on the hill of fare; but one of the guests told me they would have no peaches while they were so high-priced as at present, fine early ones bringing $2.00 and upward per bushel by the wholesale. I greatly enjoyed my ride through the great peach-groves, some of them containing hundreds of trees, and so north on to Port Clinton.

It was at the latter place that I had a pleasant visit with our friend Julius Johannsen, who has written somewhat for these pages. The house was unusually pleasant; in fact, great cracks or fissures showed themselves in the rich black ground comprising his garden. He had an opinion that it was not of much use to cultivate while the weather was so very dry; but still he quite mentioned he could stop the ground from cracking and get tolerable crops by keeping two or three inches of the surface soil stirred constantly, and kept fine and mellow. This is the secret of their raising crops without irrigation, in California; and, in fact, the finest peach-orchards on Catawba island are cultivated so constantly that the ground was as fine and mellow as a posy-bed, and not a weed was to be seen.

Of course, there is not any money when men pass without any rain. If I am correct, friend Johannsen has not yet taken a pound from his hives. His ground is nicely undermined, and he is getting small fruits well started. His land is a little outside of the peach-locust and plum-district, and he has something like 200 acres handsomely planted, and grown trees as I ever saw. His plum-orchard is well-cultivated, and the earth is kept fine and loose.

A beautiful graveled road runs from Port Clinton to Lakeside. Just a word here about graveled roads. Through the sandy regions of the northern part of the State of Ohio I have been delighted to find some of the finest roads for wheeling that can be made. In fact, one can make better speed on these than he could on a road made of planks, paving-stones, or even sawed flagging. None of these can be laid so that there is not an unpleasant vibration as the wheel goes over the joint. With the graveled roads, however, there is no joint and no jar. It may be undulating a little, but these undulations are like the waves of the sea; and one feels, while riding at high speed, as if he were on the water. I have found the finest roads in Marion County. There they have always made up at the side of the graveled road; and in summertime some of the teams—sometimes all of them—take the dirt road in preference to the hard gravel; this leaves the well-built and expensive road entirely for the wheelers. The surface of the road is hard enough to crown, the summer rains wash off all soil, dust, and trash, and the rubber tires strike nothing but the smooth, unyielding graveled surface. One day, after plowing through sand and dust I struck one of these graveled-pikes, with a pretty good wind at my back. It seemed like flying; and I pretty soon discovered that my rate of speed frightened the teams in the adjoining dirt road, and therefore I had to slow up in passing. I once had an opportunity, however, of running four miles without any accident, and as the horse any happen to be in the way, but those that get frightened by such an unusual sweeping apparition. I don't know what all chickens' sense. Instead of running out of danger, they seem bent on running into it. They will manage to get right before your wheel, even if they have to run several feet in order to get there; and they will squall, and make the gravel fly with both legs and wings, in an insane attempt, apparently, to beat the wheel in a straight run. Of course, we do not mind the looks; but I hope no wheelman is guilty of running over chickens when it can be avoided. If it can not, I think he had better offer to pay a reasonable price for the damage done.

By the way, are there not graveled roads in Western Ohio, where the wheeledmen have not apparently chosen a path on either one side of the road or the other. After one wheelman selects a fair runway, all the rest seem to follow by general consent; and the more the wheeled-track is used, the firmer and smoother it becomes. Where the roads are sandy, in a little time a very good path (a very narrow one) will be made right through the grass on the roadside. Such a path is not a hazard to the wheeled vehicle; in fact, the more it is used by the barefooted boys and girls on their way to school, the nicer it becomes. It is a great mistake, however, to let horses get into the wheelmen's path. I judge the something will soon be done for the protection and encouragement of a way expressly for wheels, where they will not interfere with other travel, and where their travel will not interfere with them.

In our next issue I will tell you something about my exceedingly pleasant visit at Lakeside; but I wish to mention one little incident right here. At one point on my ride I saw a fellow beating a poor old horse unmercifully. Without thinking of the consequence, I turned my wheel into his garments, and was able to change his side so quick that he hardly knew where I came from. I asked him to stop whipping his horse. He was mad at my sudden intrusion, and refused. When I got out my pencil, however, and told him to please give me his name, he looked a little. He said the case came very near running over his little girl, and he was going to teach it not to do it again. I told him I was a Christian man, but I believed in law as well as gospel, and that, unless he would come to me his promise to stop whipping any more, I would feel obliged to teach him something about the law. He finally promised, and, to make sure he would keep his promise, I told him I would ask a neighbor to keep watch of him; and if he whipped any more, I would be called to account. The neighbor told me that this man had been fined, several months' before, for whipping the same horse. Now, here is a suggestion: Have such men put under this kind of bond for good behavior. It may be best for several of the neighbors to join hands, in some cases.
lonesome and secluded place occupied, she takes hold of the situation bravely. When we crossed Mr. M.’s path in Ventura he was indulging in dreams of bean honey. Every year he moves an apiary into those great bean-fields. An eighty-acre grove of those tall gum-trees gives shelter, and makes a beautiful place in which to plant an apiary. Mr. M. calls this his movable apiary. Every thing is fitted for moving in the shortest space of time in preparation. The extracting-house is so constructed that it can be taken apart in sections, and folded into a small space. The upper half is surrounded with wire-cloth screen; through this the swarming operation can be watched, and it also serves the gentleman’s hobby of thorough ventilation. The twelve-step step-ladder and Manum swarm-catcher, Mr. M. thinks, are invaluable aids where the bees persist in getting to the top of those tall trees.

The bean-field apiary is usually worked with 300 colonies; and, being located three miles from water, the fluid is hauled to them in one of those big sixteen-barrel tanks so common in this region.

Mr. M. has had much experience with out-apiaries, having at one time four upon his hands. He thinks he can work two to better advantage than he can a greater number. The greater number requires more helpers and more expense.

Fruit-drying interferes with bee-keeping in this valley. Thousands of apricot-trees dot the landscape. The fruit is dried largely, and bees will work much upon the drying fruit. Mr. M., in order to live in peace with his fruit-neighbors, has several times paid quite liberal damages. No method, it seems, can be devised to prevent the bees working on fruit. To cover with screens is too expensive; to shut the bees in their hives is also expensive, and troublesome and dangerous to the bees. It might be asked why the apricot-grower does not dry by artificial heat. While it is done for some fruits, it is evidently cheaper to dry by the natural heat of the sun, for it is sure to shine every day for months.

Mr. Mendelson is an enthusiast in the beebusiness, and, for the sake of continuing in it, he has thrown many mercantile chances over his shoulder, and does not seem to regret it.

There is one point in Mr. M.’s management that shows his business qualities; and that is, he usually gets a good price for his honey, or a little better than the rest of us. With that remark I will leave Mr. M. until our next.

THE PERFECTION OF FRUIT GROWN ON AN ISLAND WHERE NO BEES ARE KEPT.

BY THADDEUS SMITH.

A week ago I spent several days at Sandusky, Put-in-Bay, and Middle Bass Island, my objective point being Mr. George M. High's, on the latter island, to see what success was made this year in growing fruit where bees do not visit. On my return home I found GLEANINGS, with your account of your visit to Catawba Island, etc. It would have been a great plea-
sure to me to meet you and taken you to see Mr. High's fruit. You would have found his peach-orchard cultivated with the same care that you found on Catawba Island, and loaded with like beautiful fruit; and, in addition to peaches, you would have found splendid apples, pears, and plums, to say nothing of a beautiful well-loaded vineyard with some hundred or more varieties of grapes. And these were grown without the aid of bees or other insects to fertilize the bloom.

When Mr. High's attention was called to the discussion of this matter of fertilization he became quite interested in the subject, and watched the bloom upon his fruit-trees very closely to see if he could discover any insects upon them. Bees, he knew, never visited his island. He made it a point to examine his peach-trees three times a day, but could not find any insects of any kind on the bloom. He thinks that, if you should visit his trees when in bloom, as you suggest you would be willing to do, you would have to bring more powerful magnifying-glasses than your spectacles, to find any insects.

Did you think to inquire whether bees were kept on Catawba Island? But even if they were, we know that there are no bees on some of the other islands where fruit is grown in the same perfection as on Catawba Island. Mr. High's evidence shows that other insects had but little to do with the matter. But Prof. Cook, long ago, in his zeal to show that bees were necessary, gave this "other insect" theory a black eye by showing that there are comparatively very few or no insects flying as early in the season as early fruit-bloom, in a northern country like this.

It is very hard to convince some people against their will or their interest. I have long since decided, by close observation and careful experiment, that bees do not injure perfectly sound fruit, particularly grapes, which are my specialty. I made a visit to my old home in Kentucky this spring, where I met an old friend—a bank cashier, but an amateur grape-grower and gardener. His grapes, of several varieties, were beautifully cared for, and bore well; but he said that he could get but little good of them, as the bees ate them all up. Of course, I took issue with him, and we had quite a discussion over the matter. "Why," said he, "don't I know? When I covered the grapes with netting I saved them from the bees!"

"My friend," said I, "don't you know that, when you covered your grapes, you kept the birds and wasps from them also?"

I had endeavored to show him that the grapes were punctured by birds or wasps before the bees visited them, but no arguments or facts could convince him that the bees were not the real depredators, and he even went so far as to believe that he was justified in destroying them.

Like this friend, some are saying, "Don't I know that bees are necessary to fertilize fruit? because, the season that we had a cold wet spell during fruit-bloom the bees could not fly, and we had no fruit that year!"—forgetting the fact that every intelligent fruit-grower ought to know, that cold wet weather prevents pollen from being disseminated in the natural way. We jump at conclusions without giving due weight to all the facts and evidence in the case. The evidence in favor of the bees is entirely of a negative character, while there are many positive facts to show that fruit has been produced, plentifully and good, where there were no bees. But it is was not my intention to discuss this matter. I started out only to call attention to the fruit on the islands where there are no bees.

You kindly mentioned in GLEANINGS, that I was a reader of it when printed by wind power. Yes, my interest in you and your writings goes still further back—to the days when "Novice" wrote for the old American Bee Journal. You remember the exciting discussions we used to have on the "hiving question." I remember the interest I felt in your account of the ascending swarm with the queen called the "Giantess," etc. I have read your writings from them up to the present time, so closely that I feel not only that I was acquainted with you, but that you were an old friend, and that I knew all the family.


WORK IN THE APIARY.

A PERFECT SYSTEM OF KEEPING TRACK OF IT.

By Wm. Muth-Rasmussen.

When a bee-keeper has many colonies to attend to, it will not do to go by guesswork or to trust to memory; neither does it pay to spend time examining colonies that do not at present need any attention. The bee-keeper should at all times know the condition of each colony, its special requirements, and the exact time when it ought to be attended to.

I formerly used slates on the hives; but as my colonies increased in number I found the slates unsatisfactory for this purpose. I now use them only on the supers, simply writing the date of the last emptying or examination on the slate, while its position on the hive-cover indicates what I want to remember. To prevent it from being moved by the wind or other accident, I drive a one-inch wire nail through the hole in the slate. The nail is easily moved, when required, with a little magnetic tack-hammer. I write the date on both sides of the slate, for fear that a shower may obliterate the writing on the upper side. It is quickly done; as, for instance, "7" means July 1.

Having had, during the last two years, to requeen a large number of colonies, I have de-