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THE YOUTH'S  COMPANION.

A FAMILY PAPER, DEVOTED TO PIETY, MORALITY, BROTHERLY LOVE—NO SECTARIANISM, NO CONTROVERSY.

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## Editorial.

### BEEES.

"Father, the bees are swarming," said Grace, running into the house. "The bees are swarming, come quick, or they will run away."

"Run away," said his sister Jane, with a smile. "I wonder how far they will run?"

"Fly away then, if you like that expression better," said Isaac.

Mr. Harvey rose from the table, for he was at dinner, and seizing a knife and a tin pail, he rushed into the midst of the bees, "dinging," as it is called, upon the pail at a great rate. Isaac took the brass warming pan, and followed his example. The hired man took the tin horn and blew away, so that altogether, there was noise enough to settle all the bees in the country. After a long time, the swarm alighted on a small fir tree, and were soon placed in a hive with which they seemed to be very well pleased.

The reader perhaps will wish to know why it is that when bees swarm, they are greeted with a ringing of pails, kettles and other noises. It is supposed that it obliges them to settle, so that they can be put in a hive. It is supposed that they would go off into the woods, if they were not arrested by the din which is made in their ears. I am inclined to think that this is a mistaken opinion. There are those who refrain from making these horrid noises, and it is said that their swarms settle sooner than the swarms of those who keep up the old fashion. Sometimes a swarm goes off without alighting, and so they sometimes do when all the pans and kettles in the neighborhood are put in requisition.

At evening, the hive was removed to the bee house, and when Isaac arose the next morning, he found them as busily at work as if they had occupied the hive for years. On drawing near, he saw a piece of comb lying on the board beneath the hive. He raised the hive gently, and took it out and showed it to his father, and asked him where it came from.

"The bees made it," said his father. "They were rather in a hurry I suppose, and did not fasten it up securely; very likely we loosened it by moving the hive, and caused it to fall down."

"Would they have done anything with it, if I had not taken it away?"

"They would have taken it to pieces and thrown it away. You have saved them some labor."

At this moment, Mr. Hurlbut, the teacher of the Academy, came up, and took the piece of comb in his hand.

"What a curious piece of workmanship!" said he.

"Very," said Isaac.

"Do you know," said Mr. Hurlbut, "that these cells are constructed on exact mathematical principles?"

"Do bees understand mathematics?" said Isaac.

"I can't say that I think they do; still their work is in accordance with mathematical principles. Sir Isaac Newton undertook to determine in what way a number of vessels could be constructed so as, without leaving any vacant space, they should have the greatest strength. The result of his mathematical investigation was, that cells just such as the bee constructs have the greatest strength and capacity. It was not then known that the cells of the bee conformed to those principles; that was a subsequent discovery."

"How do you explain it, sir? Bees surely do not study mathematics."

"I suppose they are guided by instinct in their work."

"There is one thing connected with this subject," said Isaac's Father, "which I should like to have explained. When we look on the works of nature, and see contrivance,—when we see manifest marks of design, we infer a designer. This is the way in which we prove the existence of God from the light of nature."

"Certainly."

"Well, now there is every mark of design in the honeycomb, and yet it does not prove the existence of a designing author. You confess that the bee does not act from design. Now if the marks of design in the comb of the bee, does not prove a designer, how do the marks of design all around us in nature, prove a designer?"

"Suppose," said Mr. Hurlbut, "I should show you some intricate mathematical calculations in figures, and you find that they are all correct. Should you not say that it proved the existence of a mathematician?"

"Certainly."

"Suppose then, I show you that the calculations were the work of a machine, such a one as was constructed by Mr. Babbage in England; would that destroy the proof of the existence of a mathematician?"

"No, I should infer that there was a mathematician who made the machine."

"On the same principle you would infer, that there was a de-

signer who made the bee, which is in some respects, an animated mathematical machine."

"I see it now."

Isaac did not at first understand the conversation, but by thinking it over, and asking his father some questions, he came to understand. It gave him an idea of reasoning—a most important idea for the young to gain.

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