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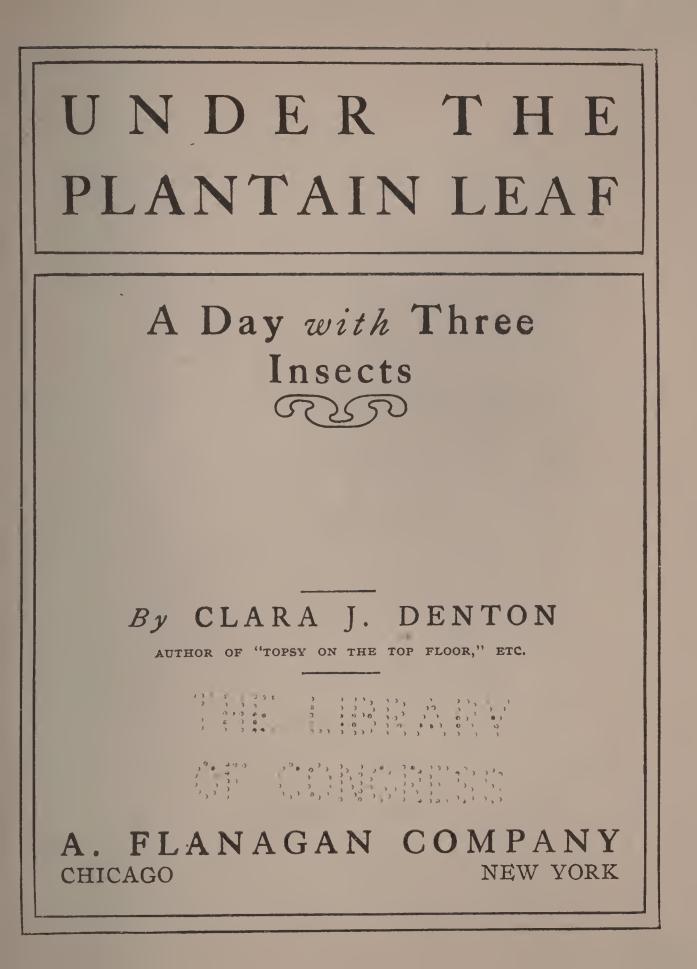
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# Under the Plantain Leaf

## CHAPTER I

### RELATIVES

It was a warm day in August; the leaves hung lazily in the air, the birds had ceased singing, and every living thing seemed resting. Even a little brown ant, which had been running briskly to and fro since the rising of the sun, stopped at last under a big plantain leaf, and stretched her six tired little legs.

"How do you do?" said a voice near her, and, turning about, she saw a handsome young wasp, folding its wings in the cool shade of the plantain leaf.

"Warm, is it not? Almost warm enough for even me," continued the wasp. "But how does it happen that you are idle? I believe I have never before seen one of your family standing around doing nothing."

Before the ant could reply, a honey bee dropped down in front of them. "Here is another busy creature. Are you tired out, too?" asked the wasp.

"Oh, no," the bee replied, "I am never tired. But I lit on that flower that you see over there, and something hit me on the wing and hurt me so that I could not fly. I dropped, and here I am."

#### RELATIVES

"Well, you might be in a worse place, and in worse company, too," said the ant in her most friendly tone.

"Perhaps," suggested the wasp, "I'd better fetch the dragon-fly, to sew you up. I have heard that he does very fine needle-work."

"Nonsense!" exclaimed the ant. "That is just some of that chattering cricket's idle talk. The dragon-fly can sew no more than I can, who cannot sew at all. But, Miss Bee, if there is anything that I can do for you, I will do it gladly."

"Oh, no," said the bee, "there is nothing that can be done for me, although I thank you both very much for your offers." "But what will become of you if you cannot fly?"

"Oh, but I think I shall be quite well in a few minutes; and I am sure I have earned a rest, for I have been hard at work not only all day, but all summer."

"Since you have been so busy," said the wasp, "you might improve the time now, while you are resting, by telling us just what you have done, so far, to-day."

"Dear me," said the bee, trying to buzz with one wing; "it would take me longer than I like to think of staying here to tell you even half that I have done since daylight, but of course an idle, trifling wasp could not be expected to understand that."

#### RELATIVES

"Come now, Miss Bee," said the ant softly, "please do not begin to scold.



ONE OF THOSE DREADFUL THINGS CALLED MEN, WITH THAT STILL MORE DREADFUL THING CALLED A BOY, CAME NEAR MY HOME AND SAT DOWN

We three should not quarrel, because, you know, we are very nearly related." "Indeed, I know nothing of the kind!" said the bee, very indignantly. "I claim no relationship with anything so useless as a wasp."

"No matter whether you claim it or not, the relationship is a very stubborn fact," the ant retorted quietly.

"How do you happen to know so much about it?" asked the bee in her most stinging voice.

"Well, the other day one of those dreadful things that are called men, with that still more dreadful thing called a boy, came near my ant-hill and sat down. The man told the boy that ants and wasps and bees belong to a great division of the insect world called—now, let me see; what did he say it was? Something about hi—"

"High, diddle, diddle, I presume," interrupted the wasp. "I have heard about that, but it had nothing to do with any of us. It was mixed up in some way with a cat and a fiddle."

"Indeed, it was nothing of the sort," replied the ant in her most dignified manner.

"I have heard the chickens in the yard talk about 'high cock-a-lorum,'" said the bee, "but I never could make out what on earth they meant. Perhaps that was what the man meant, although I do not see how the chickens could know more about it than we do ourselves, if it refers to us." "Pshaw!" exclaimed the ant impatiently, "that is not the right word, at all. If you will only be quiet for a few minutes, I am sure I can think of it. Now, let me see —hi- hi- hi—oh, I have it, at last! —hymenoptera."

"What a queer name!" said the bee and the wasp together, and they repeated the long, hard word over and over again, as though they enjoyed saying it.

"Perhaps that other word means something about the chicken family," said the wasp wisely.

"If hens were not so stupid, we might inquire and find out," observed the ant. "But I have never been able to make one of them understand me, although I can understand them easily enough."

"Of course," buzzed the wasp. "Who could not learn to understand them, when they say the very same thing day after day, and year after year?"

"And not at all clever, at the best," added the bee.

"Well, never mind the hens," said the ant. "Let us talk of something more interesting than the poor creatures that scratch, scratch, all day long in the dirt."

"Yes," put in the wasp, "let us talk about ourselves, for instance."

"I have noticed," said the bee, "that whenever anyone proposes to talk about something interesting, it means that he wishes to talk about himself."

"That is the way it is with humans, at least," said the ant.

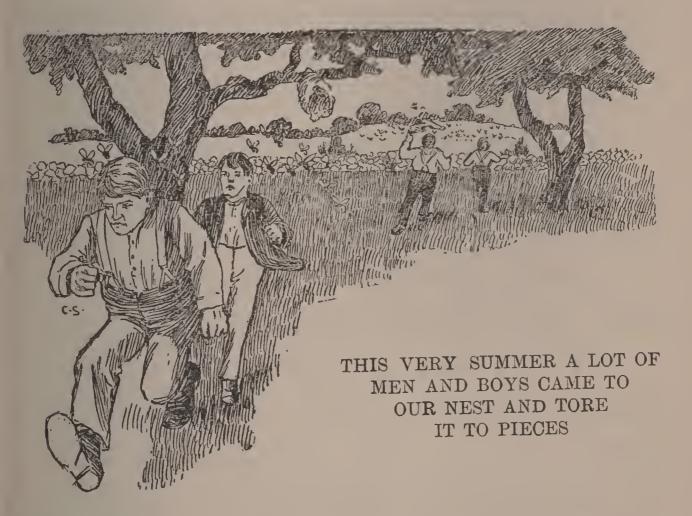
"Now, see here!" buzzed the wasp in a rage; "if you compare me to a human, I shall feel forced to leave your company. There is nothing, in my opinion, quite so contemptible as a human."

"How can you talk like that?" the ant demanded. "Do you not know that the human being is the noblest creature on earth?"

"I know he is the meanest creature on earth!" was the wasp's sharp retort. "Is there another creature that would attack and destroy an insect merely for sport?" RELATIVES

"I am quite sure I do not know of any," admitted the ant reluctantly.

"This very summer a lot of men



and boys came to our nest and tore it to pieces, killing many of our number, and so entirely ruining our home that we have had to build another," the wasp went on.

"But you must remember, Miss Wasp," said the bee, "that you have a very bad reputation, and that may be the reason you have so many enemies."

"Well, I can assure you we lived up to our reputation that day. We sent more than one of 'the noblest creatures on earth' away howling with pain."

"Which was, of course, very poor policy, since it only increased the hatred people feel for you."

"But how strange it is that no one seems to remember we do no harm to anyone if we are not disturbed! I am sure none of my family was ever known to fight when away from its nest, unless it was first injured in some way. We are not quarrelsome; we simply try to defend ourselves."

"Well, it is a good thing," said the ant, "that we hymenoptera all have the power of stinging. If it were not for that, we should come to grief more frequently than we do." "Oh, yes,—hymenoptera,—that is what I wanted to talk about. Can you tell us, Miss Ant, why we are called by that long, hard name?" asked the wasp.

"Yes, I heard the man say that it was taken from two Greek words, one meaning a membrane or skin, and the other a wing. All of us, you know, are alike in this one thing,—we have four membranous wings. So, though one of us is a bee, the other a wasp, and the other an ant, we are all hymenoptera."

"Indeed," said the bee, with a laugh as scornful as a bee could give, "I should really like to know, Miss Ant, where your wings are! Do you roll them up and leave them at home in the nest, when you go out for an airing? If wings make 'hymenoptera,' then you surely are not one. Just listen, Miss Wasp, to this: Miss Ant claims to be related to us on the strength of her wings, when she has never had a wing in her life!"

"I must confess it is a little queer, to put it as mildly as posRELATIVES

sible," said the wasp; "but perhaps Miss Ant is not to blame. No doubt the man who had so much to tell was not so wise as he pretended. I have heard that humans are very deceitful things. Come, Miss Ant; what have you to say for yourself? I believe in fair play, and so I never condemn any one unheard."

# CHAPTER II

### FAMILY NAMES

The ant did not seem in the least offended. "Thank you, Miss Wasp," she said modestly. "It is very kind of you to look at the matter in that way. It is like many other things in this world; it seems queer at first, but is very easily explained. The trouble is that most of us are not willing to wait for explanations. We wish to understand things all in a minute."

"I am afraid that is true," admitted the wasp. "But now we should like to hear your explanation." "Some of us," continued the ant, "have wings like yours, but as I am only a worker, or imperfect female, I have not the gift of wings."

"That seems hardly fair," observed the wasp. "Now I, also, am only a worker; yet see my beautiful wings," and she proudly waved them back and forth.

"It is the same with me," said the bee. "I am a worker, but I am not deprived of wings on that account."

"Certainly not. It would indeed be sad if you two had been turned out in the world without wings, since you need them in your work. How could you go among the flowers without your wings?" "That is true," assented the bee and the wasp together.

"But with me it is different. In my work I have no use for wings. They would only be in my way if I had them."

"But do you never wish for wings?" asked the wasp.

"I was foolish enough to do so when I was a very young ant. But I soon discovered that, after the one short and merry dance of the winged ants in the air, the males drop dead, and the females crawl away into dark places, and rub off their shining wings, forever after staying at home in the dark, doing nothing but laying eggs. Then I was very well satisfied to be a worker and have no wings." "So should I be under those circumstances," admitted the wasp. "I have noticed that things are pretty well evened up all around. We none of us have all the good things, neither are any of us afflicted with all the disagreeable things."

"But now, if you will excuse the liberty I take," said the bee, "there is one point that looks foggy to me yet, in spite of your kind explanations, Miss Ant, and—"

"Dear me!" interrupted the wasp saucily, "I am surprised, Miss Bee, to hear that there is anything you do not understand! I thought you were one of the clever ones who see through a thing in a moment."

"Come, come, Miss Wasp," said the

ant with unusual sharpness, "do not be disagreeable, or we shall begin to think that there is some reason for your bad reputation."

"Oh, no offense is intended, I am sure," apologized the wasp, readily. "I was only a bit surprised to hear the wise bee own up to her ignorance."

"I suppose you thought she was like some humans that I have heard about, who will never ask questions for fear of showing that they do not know everything, and so their store of information is never increased, and they live and die in ignorance. Miss Bee is, as you say, wise, too wise to pretend that she knows everything, and so she will continue to grow wiser every day. "But, now, what is the question that you wish to ask, Miss Bee? If I cannot answer it I will tell you so frankly, and then we will both try to discover it from some source. For, you know, there is a way of finding out almost everything, if we only know where to look for it."

"This is what puzzles me: why should we bear the same name when we have nothing in common but our wings?"

"If that statement were true, then there would indeed be good cause for your question. But it is not true. On the contrary, we have many things in common."

"Tell us about them," the others begged. "In order to do that I must ask you a few questions."

"Oh," exclaimed the other two, "that is a different matter. It is far easier to ask questions than it is to answer them."

"So, it is, sometimes," the ant agreed; "but I shall ask you those that are very easy. In the first place, Miss Wasp, how many conditions or stages of growth have you in your family?"

"You mean by that, I suppose, how many times do we change our shape and general appearance?"

"Exactly."

"Well, the answer to that is easy enough. We change four times; that is, if you count the egg." "And how many changes have you, Miss Bee?"

"The same number."

"And we ants, also, have four. There is with all of us, you see, first the egg, then the larva or eating stage, then the pupa or sleeping stage, then the imago or perfect insect."

"But," said the bee, "I have always supposed that all insects had these four stages to pass through." "Many kinds have, but all of them except the hymenoptera have another peculiarity. Miss Wasp, do your larvæ stir about and feed themselves?"

"No," replied the wasp with an impatient buzz. "I only wish they did. There would be some pleasure in living if it were not for having to feed them—the greedy things!"

"And now, Miss Bee, how is it with your larvæ? They do not get their own living, do they?"

"Indeed they do not," said the bee mournfully.

"Our larvæ, also, have to be fed," said the ant; "so here again we are alike. But the other insects who have four stages of growth do not have to feed their larvæ, which go around and feed themselves."

"What a lucky thing!" exclaimed the others.

"It is only the hymenoptera, among these four-growth insects, that are obliged to feed their young." "Rather hard on the hymenoptera," said the wasp.

"But I have often thought," the ant suggested, "that that proves us to be of a high order of beings, for I have heard that there is nothing in the world so helpless when it is young, as a human."

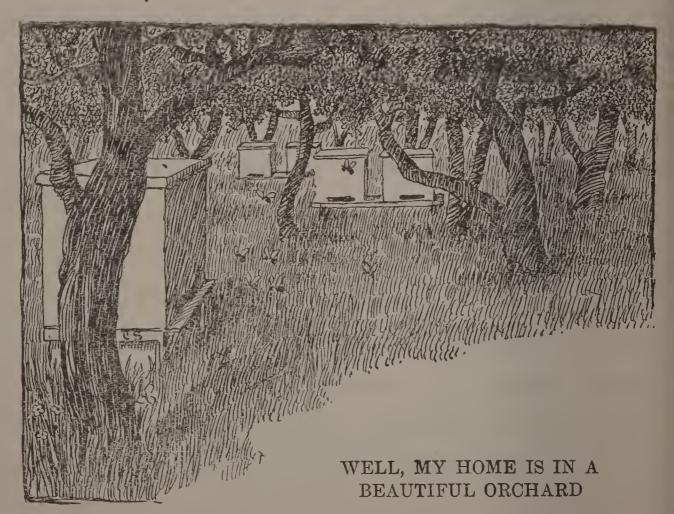
"There is some consolation in that," said the wasp sharply. "I am glad they have a period when they cannot harm us. What a pity they do not stay in that stage always, the meddlesome things!"

"But now that you have discovered how much alike we hymenoptera are, I must tell you that, although this is our order name, each of us belongs to a separate genus, or family, and each family has its own name."

"Why, to be sure! I have heard of that before," the bee put in.

"Oh, do tell us about it," said the ant, her curiosity aroused.

"Well, my home is in a beautiful orchard, and there are thousands



and thousands of bees there. One day, when the humans were prowling around after the honey that we store up for our winter use—

"But why do you let them have it?" interrupted the wasp angrily. "Why don't you have a little grit, and sting them?"

"We cannot help ourselves," said the bee sadly. "They build our hives in such a way that they may take out the boxes with the honey in them when we do not even know it. But as they always leave us enough to live on, we let them alone. Well, as I was saying, one day when they were poking about in this way, I heard one of them say that the place was called an apiary, because of our family name. I wondered what that could mean, but I begin to understand now."

"Yes," said the ant, "your family name is Apis."

"Dear me," buzzed the wasp, as though very much excited, "how very learned we are becoming! But I must say, Miss Bee, your family name is very suggestive of Apes, which I have heard are very disagreeable creatures. I do hope they are not related to us, also."

"Oh, no indeed, not in the least," said the ant with a hymenopteric laugh that might have been heard three lengths of a wing away.

"But how about the wasp?" asked the bee. "Has she no family name? Or is she so famous throughout the world that she does not need one, and gets along well enough as plain Miss Wasp?"

"Do not distress yourself about my family name," said the wasp sharply. "I am perfectly content to be known as Miss Wasp, and I presume I shall be much happier if I never learn of any other. I consider it very foolish to pay so much attention to names, since they seem to have nothing to do with either our character or behavior, and relate only to the things we cannot help." "But, my friend," said the ant in her most soothing voice, "do not be

so faint-hearted in the pursuit of knowledge. How foolish you would feel if I should meet you and the bee some day in a great company, and should address each of you by her family name, and you should be too ignorant to respond to yours! And your name is so pretty. It is Vespa."

"That is not so bad," said the wasp, quite restored to her good humor; "but now, if I am not too bold, may I ask your family name, Miss Ant? And also, if I may be allowed another question, how do you happen to be so wise?"

"My family name," answered the ant, taking no notice of the second question, "is Formica. So, although our general name is the same, our family names are quite different."

34

## FAMILY NAMES

"It is nice to have something that belongs specially to each of us," said the bee, "and I am sure I think much more of myself since I know I have a name which does not belong to every other insect that happens to have a pair of wings."

"But you have not answered my other question," persisted the wasp, for she was determined not to be out-witted by the clever little ant. "I wish to know why you are so much wiser than an Apis or a Vespa? Is it simply because you are a Formica?"

"No," laughed the ant, waving her antennæ about in glee. "My wisdom, as you are pleased to call it, has nothing whatever to do with my name. In fact, if you will allow me to correct you, it is not 'wisdom' at all, but knowledge, which anyone may win by making a little effort. I gained mine, as I told you before, by keeping my ears open, while working around my ant-hill."

"But speaking of 'ant-hill,' reminds me that we have wandered away from our starting point."

"I cannot see that we have wandered very far," said the bee. "We seem to be exactly where we were —under the big plantain leaf. But that reminds me of something, too, and that is that I should be moving on. I have already spent too much time here in the shade, resting and gossiping." "Oh, come now, Miss Apis," said the wasp, "what is the use of being so sharp at twisting my words? You know very well I did not mean that we had wandered in our bodies, but simply in our conversation."

"Of course," said the ant, who was in continual fear lest these two troublesome ones should break into an open quarrel. "We understand that you mean we have wandered from the subject of which we were talking at first."

"Certainly," the wasp agreed, in her most dignified manner, "that is exactly what I mean."

"But, really, I have forgotten what the starting point was," the bee said, more pleasantly. "You were to tell us what you have been about all this long, hot day."

"Who said so?" asked the bee sharply.

"Oh, don't put yourself out, now," said the wasp very sarcastically. "I really do not suppose there is much need for you to tell the story, for I think I know pretty much what you have been about."

"Indeed!" said the bee. "Let me tell you that if you should even try to imagine all that I have done since I first started out early this morning, your small brain would burst." "Come, come!" cried the ant. "Why is it that you two are determined

to get into an argument over noth-

ing? Short-lived creatures like us should spend every moment in making one another happy, not in wrangling over trifles. Now I have a plan to propose: let each one of us take her turn in telling the story of the day that is now so near its end."

## CHAPTER III MISS FORMICA'S DAY

**T**HE wasp turned to the ant. "I will agree to that," she said, "if you, Miss Formica, will begin." "Oh, no," said the ant; "it is not at all fitting that I should be the one to begin, for I have not the power to make a noise in the world, like either one of you. I am, as you know, only a poor, silent creature at the best."

"Well," said the bee, "if we are to go by the amount of noise we make, I think Miss Vespa should begin, for I am sure she can outbuzz me."

40

"Out-buzz you, indeed! As though anyone could do that!" exclaimed the wasp angrily.

"But, then, I suppose," hummed the bee as though to herself, "that the poor, idle thing has very little to tell."

"Which shows," said the wasp, more angrily than ever, "how little you know about me, if you do belong to the same order. It is the common belief, however, and I suppose we should not expect you to be wiser than the rest of the world. Everybody says 'as busy as a bee,' but who ever heard anyone say 'as busy as a wasp'? And yet, I can assure you that one is quite as true as the other."

"Yes, indeed, Miss Wasp," said the ant, "I know you are a very busy person, and surely there is no better way to prove the truth of this to our relative here than for you to give an account of your labors."

"I do not object to telling my story when my turn comes," said the wasp, more gently, for the ant's soft words had subdued her fiery temper, "but I think that you should make the beginning, for you have shown that you are much wiser than either of us."

"Yes," said the bee impatiently, "and please hurry, for my wing begins to feel better, and I must not stay here much longer." "Well," said the ant, waving her antennæ up and down to make sure that there were no disagreeable creatures about, to interrupt her when she was well started with her story, "the first thing that I did this morning was to help some of the pupæ out of their cocoons."

"We let ours get out as best they can," the wasp put in. "But do tell us how you go about it."

"First I tap, tap, tap, on the shell of the cocoon with my antennæ until I make a little opening; then I make it bigger and bigger, until the helpless little thing is out. As soon as it can stand alone, I straighten out its antennæ, pick the bits of cocoon from its legs, and finally bring a drop of honey, which I put in its mouth. As soon as it has fairly swallowed this, it is ready to run about with the rest of us."

"Dear me, what a lot of work for one little ant!" said the wasp. "If it were as much trouble as that to get wasps into the world, I think there would not be many. Did you spend the whole day getting babies out of their cradles?"

"Oh, no, indeed. I had to feed the larvæ."

"I have to do that, too," said the wasp, "and a hard task it is." They are such greedy little things."

"Our larvæ are just the same," said the bee. "Dear, what a lot of work they make!"

44

"Which proves what I said before," said the ant; "that we hymenoptera are all alike in some things. Then another thing that I have done," she continued, "was to carry into the nest a great many warm grains of sand, and place them around the eggs. The sun was so very hot to-day that we did not dare carry the eggs out where it would strike them; so we had to follow the other plan to keep them at the right temperature."

"Oh, dear! We never go to all that trouble," said the wasp.

"Neither do we," said the bee; "it really seems to be a good deal of work to be an ant; and yet I suppose you are not of much use to human beings?"

"That is a great mistake. You must know that we eat many tiny insects that would destroy useful plants."

"That is the way with us," said the wasp. "The world calls us useless, but it would be a very different sort of place if the wasps were not in it to help clear away troublesome little creatures."

"Well," said the bee, "we do not eat creatures at all, so we are not useful in that way, but—"

"And what else have you done to-day, Miss Formica?" rudely interrupted the wasp, who was not in the mood, just then, to hear the bee hold forth on her own usefulness. The ant, with a reproving look at Miss Vespa, continued her story:

"Well, the next thing that I did was to help my fellow-workers in the digging of a long tunnel which is to lead to a new nest we are about to make. I should be at that business this very minute, instead of wasting my time here, for to-morrow I shall be busy looking after the queens, or females. Our nest is so full of them that we expect them to come out at any time, and when they do come out we watch them very closely, to see that they do not wander off and start new nests."

"But how can you workers do anything with the queens, when they have wings and you have none?" asked the bee.

"That is very simple. After they have had their short and merry dance in the air, they drop to the ground, tired, and look about for a place to lay their eggs. Then our work begins. Several of us surround a queen and drive her into our nest, thus making sure of her, for she settles down at once to the business of laying eggs."

"But before you go any farther with your story," said the wasp, "I wish you would explain where you get the honey that you say you feed to the young ants. I know you do not make honey."

"Indeed we do not. We have a

much easier way of getting honey than by making it. Did you ever happen to hear of a little insect called the aphis?"

"No," was the reply; "what is it like?"

"It is a very tiny creature that lives on plants. The food that it eats turns to something that is like honey, and it has the power of giv-. ing out this honey. Perhaps you have seen a human milking one of those things called cows?"

"Oh, yes."

"Then you have some idea of the way we get our honey. The aphis is our cow. We pass our antennæ slowly and gently along the sides of the aphis, and then it gives down to us a drop of honey, which we quickly swallow."

"How strange! I should think you would be very fond of this little aphis, since it is so helpful to you."

"We are very fond of the little creatures," said the ant. "We look after them as closely as we do after ourselves. We protect them from their enemies in many ways. We also take care of their eggs, carrying them into our nests and out again according to the weather, just as we do with our own eggs."

"Since you do all this, I am sure that you pay for the honey you use," said the wasp. For, you see, although the wasp is considered a sharp and unpleasant creature to

**50** 

have around, she is quite ready to own the good qualities of her relatives.

"But," said the bee, "do you store up food for use in the winter, as is done by our family?"

"No, we do not."

"Then how do you live through the cold weather?"

"We crawl into our nests and sleep the cold days away, since there is nothing better to do. Those of us who are strong and well grown wake up and come out when the warm days arrive, but the weak ones do not live until the cold weather is over."

"Are you a young ant, hatched out this season?" asked the wasp, "or have you lived through the winter?"

"I have lived not only through this winter, but through several," said the ant proudly.

"That must be the reason you are so clever," said the bee.

"Oh, if you think I am clever, you ought to have heard the man tell about some other kinds of ants. I am nothing but a common little garden ant, and really can do nothing at all when compared with the others that he told about. They do not belong to the Formica family, although they are true ants. I cannot begin to tell you all the strange and wonderful things that he told about them. Even if I could re-

52

member all that he said, I could not spare the time to tell you of it, but if you will only keep your ears open when the humans are around you may possibly hear about them, yourselves."

"Pshaw," said the bee, "that would be altogether too much trouble! Besides, I never hear much of what humans say. I would rather listen to my own buzzing."

"So would I," said the wasp; "and in that I am sure that both you and I show excellent taste. Now listen was there ever any human sound that could excel this?" and she began to buzz with all her might.

The ant tried her best to make herself heard, but her small, weak voice was drowned by Miss Vespa's loud buzzing, so there was nothing to do but to allow her to hum away until she was tired of it. When she at last paused in her unchanging song, the ant said:

"Yes, I agree with you, that your music is very beautiful, but I hope you do not imagine that buzzing is the only melody in the world. Surely you have heard that made by the birds, which you must admit is very delightful."

"Yes," replied the wasp, stretching her wings proudly, "it is true that the noise made by the birds is not very bad. Indeed, I often think it makes a fair accompaniment to my song, and I do not object to it at all, unless the birds get too near to me, when it often is intolerable, some of them screech so."

"Humans also sing very sweetly, sometimes," continued the ant.

"Oh, as to human song," said the wasp scornfully, "if you consider that fine, Miss Formica, I can only say you have very singular taste."

"I assure you, Miss Vespa, you cannot have heard the best human singing, or you could hardly express yourself in that manner. If you could only hear some of the voices that have charmed and delighted me! You see, that is what I gain by being so silent a creature myself, I hear a great many delightful sounds from others. This, I am sure, gives more variety to my life, than if I always listened to myself, and had no ears for anyone else."

"Pshaw," said the bee, "that will do for anyone to say who cannot make the faintest little buzz herself. Why, if you could sing, Miss Formica, you would be just like us. You would be delighted with the sound of your own voice, just as we are."

The ant was silent several moments; then she said slowly:

"Perhaps you are right. Perhaps it it is natural for each living creature to think its own gifts the best."

"I have heard," said the wasp wisely, "that there are certain beings in the world that are not contented with their lot, and are always wishing they had been born something else."

"That is the way with humans," rejoined the ant, "but I think there are no other living things that are so foolish. It is very strange, but I have never been near humans for any length of time without hearing them wishing for some other lot in life, or some other gifts than those which they possessed."

"Well, really," said the bee, "what an uncomfortable existence theirs must be! I think I should hardly care to live if I were wishing all the time that I had been born something else than a bee. But do these humans that you tell us of have nothing to do but stand around and wish for something that they cannot have?"

"They have work to do, of course, but they neglect it."

"Well, I have no patience with things like that," said the wasp, "and I am very glad I am not a human, but only a little brown wasp."

"That is right, Miss Vespa," said the ant. "And now, since you are so well contented with this life of yours, tell us, please, about your day. Miss Apis and I are waiting impatiently to hear it."

## CHAPTER IV MISS VESPA'S DAY

MISS VESPA buzzed away very gently to herself for a few minutes, as though in doubt where to begin her story.

"Come," said the bee at last, "we shall think you have nothing to tell us if you do not begin pretty soon. I am anxious to be gone, as you well know."

"Well, as I said before, instead of having nothing to tell, I am one of the busiest creatures alive. This morning I was up bright and early, as usual, and my first thought was as to where I should go for something to

**5**9

feed the hungry larvæ. Since you both do this, as well as I, you know just what work it means. Last night, as I was going home to my nest, I chanced to pass a butcher's shop, and I said to myself: 'Now, to-morrow morning I will come here for my breakfast, as well as for the day's food for my charges.'"

"What in the world could you find to eat in a butcher's shop?" asked the bee in surprise.

The wasp buzzed away for a moment or two. Then, turning to the ant, she said:

"You who are so wise must know why I went to the butcher's shop. It seems to puzzle Miss Apis, but I am sure it is perfectly clear to you." "No," answered the ant, "I assure you I am quite as much in the dark as our cousin here. If you had said a grocery store or a baker's shop, I might have thought that you were after sweets, but a place where dead animals are sold, and where they are kept so carefully covered up—dear me! that is quite beyond me."

"It is very strange," said the wasp, "that although you are both my cousins, you do not know enough about my tastes to guess that. Well, I will tell you: I was after the big blowflies that hang around there, and of which all of our family are very fond. I went back and forth from my nest to the shop many times, and as I destroyed so many of these troublesome creatures for the butcher, I also took—for toll, as it were—a few bits of the nice red meat. This made the selfish butcher so angry that he tried to kill me, quite overlooking the good turn I had done him in ridding his shop of so many miserable flies. But that is the way with humans; they never know their friends."

"That is true," assented the ant. "Is it not strange that creatures so wise as humans do not understand how much help we little beings are to them?"

"They are good to me," said the bee modestly.

"Certainly," assented the wasp. "They will not kill one of your fam-

ily, for they love your honey, and they will say, also, that you do not sting if you are not disturbed. But people will fly at me when I am buzzing about for my own amusement, because, they say, if I am not killed I will sting some one. They never seem to know that I am quite as harmless as you, Miss Apis, if they do not molest me in any way. Of course, if they come near our nest, as I said before, we are likely to show our temper. But who can blame us for that?"

"Humans certainly ought not to," said the ant, "for they, too, will fight for their homes and friends. I have even heard that they kill each other, sometimes in great numbers, just to gain a piece of ground. They call it 'war,' I believe, and think it a very honorable and glorious thing."

"Oh, come now," said the bee; "surely, Miss Formica, you do not expect us to believe that they kill each other, and feel proud of it! I cannot believe that, even of a human."

"It is true, nevertheless," persisted the ant. "I have heard a great deal about it. Men are given what is called 'money,' and are sent off to kill other men, that they may gain great honor and glory. They fight over a piece of ground just as we ants often do over an ant-hill." "Well, really," said the wasp, "what is the use of being one of those wise humans, if they know no better way to settle their troubles than by killing one another, just as we poor ignorant insects do! I am more than ever contented to be a wasp, now I have heard that."

"But, pray, continue your story, Miss Vespa," urged the bee. "Did you discontinue your visits to the butcher shop?"

"Indeed, I did not, but after the butcher had rushed at me two or three times with a big cloth, and tried his best to strike me with it, I decided that his feelings toward me were not altogether friendly, and so I kept out of his way. It was easy

enough to do this, for of course he had to wait on the people who came into the store to buy his meat, so he could not watch me all the time. When he was busy cutting the meat, I would fly down close to his head, and buzz my loudest. This would scare him, and he would strike at me with his big knife, when I would again soar to the ceiling, and buzz, buzz away. Oh, how angry he was, and how I did enjoy the game!"

"And did he not manage to hit you, at all?" asked the bee.

"Not even once. Although he was so many times larger than I, he was no match for my swiftness, so I managed to get all the flies I wanted, as well as bits of good rich meat, and, when I had got all I wished there, I flew away, as fresh and happy as when I first set out.



HE WOULD STRIKE AT ME WITH HIS BIG KNIFE

"My next task was to help enlarge the comb in the nest. To do this I take a small bit of dry wood in my mouth, and work it about with my strong mandibles, moistening it with the sticky stuff that is always ready in my mouth. Soon I have a nice soft pulp, which I can fashion into any shape I like while it is moist. This stuff I use for making the comb. When it is dry it looks just like brown paper, but it is much stronger than the strongest paper."

"Do you put honey into this comb when it is done?" asked the bee.

"No," was the reply. "Why should we, since wasps do not live through the winter as bees do? We use the cells of the comb simply for the queen wasp to lay her eggs in. Each cell has one egg in it, and as soon as the perfect wasp leaves it we clean it out and the queen lays another egg in it. This goes on all summer long; so you see one nest hatches out a great many wasps."

"But if you all die in the winter, how do you start a new nest?" asked the bee.

"Oh, there are always a few old females that are strong enough to live through the winter, sleeping the cold weather away under cozy heaps of bark or in the hollow of a tree, or some place of that kind. When the warm days come, the female crawls out and goes to work to make a nest in the way I have just explained. She divides the comb off into cells, then puts an egg into each cell, and for a time she has to do all the work herself, even feeding the larvæ."

"It must be rather hard work to be a queen wasp," said the bee.

"So it is for a while, but she soon has plenty of helpers, for the first wasps that are hatched are always workers. Then she can take things a little easier, you see, so that on the whole it is a rather good thing to be a queen, for she lives on year after year."

"Yes," said the ant, "and that is worth working pretty hard for."

"Your story has been very interesting, Miss Vespa," said the bee, spreading her wings for flight; "and I think I must bid you good-afternoon." "Oh, Miss Apis," cried the ant, running back and forth excitedly, "that will not do! You must not leave us in this way."

"It grieves me very much indeed," said the bee in her most polite manner, "but I have already stayed much longer than I should have done."

"You do not mean," said the ant, "that, now you have heard all about us, you are going off without telling your story!"

"Really, really," said the bee earnestly, "I must not stay any longer to-day."

"But," said the wasp, with a tremendous buzzing, "did we not answer all your questions, and tell you everything, keeping you amused while you were forced to remain here resting?"

"Yes, yes," returned the bee, "but you see..."

"And," interrupted the wasp, "would not the time have seemed much longer if we had not been here, so that you might have flown away before your wing was quite well, and thus have lost the use of it, perhaps forever?"

"Yes, that is all very true, but, you see, I must do my duty."

"But is it not your duty to keep your promises?"

"Of course it is, but you cannot say that I made any promises."

"Perhaps not in so many words," said the ant, "but you must admit,

72

Miss Apis, that you allowed us to think you intended to take your turn at story-telling."



A LARGE PURPLE BUTTERFLY DROPPED DOWN AMONG THEM.

Just at this moment, like the soft flutter of a feather, a large purple butterfly dropped down among them. "Oh," said the ant, "how fortunate! Here is a judge to decide for us. You are very welcome, Mr. Butterfly."

"I am glad to hear it," replied the butterfly; "and now, what is it that you desire of me?"

"We three have been having a slight dispute, and we wish you to settle it for us. I am willing to leave it to you, and I am sure the rest will be, since you are no relation whatever to any of us."

"How do you know he is not related to the bee and me? I am sure he can fly," said the wasp.

"That is nothing. Birds, also, can fly, and yet I do not suppose you will claim for a moment that you are related to them. No, the butterfly is not even in the same order with us. He belongs to the Lepidoptera."

"Well, the names are something alike, anyway," said the wasp stubbornly. "But, now, come, Mr. Lepiwhatever-your-name-may-be, please decide this matter for us. Miss Formica. will you state the case to him?"

"I suppose," said the ant, coming closer to the bee, "that you will do as he says, Miss Apis?"

"Certainly, if it agrees with my own wishes," said the bee, pertly.

## CHAPTER V THE BEE'S STORY

THE wasp was just about to make a stinging retort to the bee's remark when the butterfly said:

"You industrious creatures seem to think that my time is of no importance, because I have no work to do, but I have a pressing engagement in a garden over here before the four-o'clocks close, so please tell me at once all about the case on which you wish me to give my opinion."

Then, amid much buzzing from the wasp and the bee, and many soothing words from the ant, the case was fully explained.

"Dear me," said the butterfly, when the others paused for his decision, "that is far too deep a question for me. Besides, I think it is almost time for the fouro'clocks to close," and spreading his purple wings he sailed away.

"What a humbug he is, for all his fine appearance!" said the wasp crossly, while the bee buzzed her loudest for joy.

"I think I may as well go, too," said the bee. "I am interested in those four-o'clocks, myself."

In another second she would have been gone, but at that very instant they heard a loud humming which made that of the bee and the wasp sound like whispering, and down plumped a handsome bumble-bee.

"Ah," said the ant, running to and fro in her joy, "here is one of our own order. Come, now, Mr. Bumble-Bee, tell us what shall be done with your first cousin, Miss Apis, who is giving us no end of annoyance by her stubbornness."

The story was then told again not without some spiteful words from the quick-tempered wasp. At its conclusion the bumble-bee gave a loud buzz, and then said something that to the ant and the wasp seemed very wide of the mark:

"I know where there is a fine field of buckwheat."

"Buckwheat, buckwheat!" said the bee in great excitement. "Where? where? Oh, do tell me where!" "So I will," said the bumble-bee, "but not until you have told your story to our friends here; for, remember, a promise implied is just as binding as a promise actually made, and since you allowed them to think you meant to tell your story, you are, according to my notions of duty, bound to do this. So if you will meet me by the bed of four-o'clocks in about two flights to your apiary, I will take you to the field of buckwheat."

The bumble-bee with a loud buzzing flew off, and the bee said crossly: "Well, I must say, you two are very anxious to learn how one poor honey bee has spent this summer day! I should feel very much flattered if I did not know it was pure stubbornness on your part."

"And I suppose your determination not to tell us was only that commendable trait, firmness. I have often noticed that what is horrid stubbornness on the part of others becomes a noble firmness when we show it ourselves," said the ant.

The bee pretended not to hear this very sage remark, but at once plunged into her story by saying:

"Well, the first thing I did this morning was to help kill the males -drones, we call them-and throw them out of the hive."

"How cruel!" exclaimed the ant and wasp together.

"It may seem so to you, whose males are not long-lived like ours, but our hive was so full of them that they took too much room, and a great deal too much honey. If we had not driven out the lazy fellows, we should soon have been turned out ourselves. The next thing I did was to set out after 'propolis.' Has either of you ever heard of such a thing?"

The ant and wasp both declared they never had.

"It is a sweet-scented, sticky stuff, which we get from the buds of

plants. We use it to spread over the inside of our hives, and to stop up the cracks. Of course we did not want it for that this morning, as we have been in this hive ever since May. But this morning a sad thing happened to us. The sentinels that we always keep at the door of the hive must have fallen asleep, or wandered away for a minute, for a bold snail came walking in. Of course he was promptly attacked, but he drew himself into his shell house. (So convenient, that-to have your house on your back!) Then we at once began to cover up his snailship with propolis, and for fear the supply would run short I was sent out after some.

"When I had gathered a small quantity I made it up into a little ball, flew back to the hive with it, and gave it to one of the others, who was waiting near the door. It did not require many trips by some of the other workers and myself to have Mr. Snail safely cemented up in his tomb, where he could make no more trouble for any one. That is the way we treat our unbidden guests."

"You may be sure," said the wasp, "that we shall never visit you unless you send us a most pressing invitation."

"No, indeed," said the ant, "even though you have so much of that sweet stuff that I love so well, I shall be content with that which our aphides furnish us so willingly."

"But go on with your interesting story," urged the wasp. "What did you do next?"

"The next thing I did was to go off after honey with which to feed the workers that are now enlarging our comb. I carried a quantity of honey, until several others also came in with food for the busy ones. Then, finding I was not needed, I went off after some pollen. I make the pollen into tiny pellets, and then put them into the little baskets which dear Mother Nature has made for me on my hind legs.

"And what do you do with it

when you get back to the hive?" asked the ant.

"I pass it over to another worker, who moistens it well and then stores it away in one of the cells."

"And then what do you do with it?" the ant persisted.

"It is used to feed the larvæ as needed. Well, after I had carried pollen for a while, there was a call for more wax."

"Oh, do tell about that," said the ant; "that must be very interesting."

"It is very simple. A number of us go out and fill ourselves with honey. Then, on our return, instead of disgorging it from the first stomach, as we do when we wish it to remain honey, we hang ourselves in the hive by clinging together in a long bunch. We remain in this position perfectly quiet, until the wax comes out on the under side of our abdomens. It is then taken off by our hind legs and used where needed."

"So, then, you had a nice rest while waiting for the wax to form," said the ant.

"Well, you may call it resting if you like, but I think hanging to another bee with your forelegs, while another hangs upon you in the same way, is very like work. For my part, I much prefer being out in the sunshine, whispering to the flowers; but we learn very early to do our duty, without regard to our inclinations."

"And do you, as well as the rest of us, give special food to the larvæ that are to become queens?" asked the wasp.

"Oh, certainly. The way we manage is this: we provide cells of different sizes for the eggs that our queen lays. The workers are in the smallest ones, the males in the middle-sized ones, and the queeneggs in the largest ones. The queen lays the workers' eggs first, the drones' next and the queens' last. When I tell you that our queen (for of course we have but one in a hive at a time) lays at least two hundred eggs a day, from the

beginning of spring until the cold weather comes, you will know that it is no small task to feed our larvæ."

"Of course, of course," said the ant and the wasp together.

"I have heard," continued the bee, "a queer story of the way in which our present queen came to her place. It seems that our first queen was accidentally killed when every queen cell was empty, so without loss of time the cell of a worker less than three days old was selected. This cell was enlarged by tearing down the surrounding cells. Then the larva inside it was immediately fed royal food. For several days it was carefully watched and tended, one bee being appointed to stay constantly beside the cell, until the time came for it to go into the cocoon. Then the cell was closed up, and it was left to itself. In a few days the hive had a new queen."

"How very interesting!" said the wasp.

"But, now, to return to the events of the day," the bee went on, "when I was released from the task of making wax, I flew out to get food for the larvæ again, and met with the slight accident that brought me here. And so, as my story is finished, I think I must be off. The bumblebee will be waiting for me, and I cannot afford to miss that field of buckwheat. You know there is nothing better for making honey."

"Well, I rather like the taste of buckwheat, myself," said the wasp, "and so, if you do not mind, I will follow along after you."

"Very well," said the bee, "I am sure there is enough for both of us." "What a pity that you cannot come, too, Miss Formica," said the wasp. "It seems rather shabby of us, who have wings, to fly off and leave you, who have no wings, all alone."

"Oh, pray, do not worry about me," said the ant serenely. "I will work a while at my tunneling, and then it will be bedtime."

"And you will not be lonely?"

"Not at all. Busy people are seldom lonely; and, besides, perhaps some of the humans will come near me, and I may be able to pick up some more knowledge—which is, I think, far better than flying away to a field of buckwheat."

"Better to you, perhaps," said the bee with a happy buzz, "but I must confess that I prefer honey to knowledge, any day."

"Well, as I have already told you, I also like honey, but unlike you I get both—honey from the aphis, and knowledge from the humans."

"But you have no merry flight in the air with the beautiful sun shining on you," said the bee. "'The beautiful sun' is very hot to-day," replied the ant, "and I much prefer tunneling in the cool, sweetsmelling earth."

"Which proves," said the wasp, "that our Creator has given to each one of us special tastes to fit our special places in the world."

"So it does," said the ant, "and wise is the bee, the wasp, or the ant, who is content with her own gifts and powers instead of vainly sighing for those of others."

"True," said the wasp and the bee together.

"But, now, in spite of your wisdom, we must leave you," added the bee.

"Yes, here we go," said the wasp.

## SPREADING THEIR GAUZY WINGS, AWAY THEY FLEW TOGETHER



"Good-by, good-by!" buzzed the bee. Spreading their gauzy wings, away they flew together, while the ant contentedly ran off to work on the new tunnel.



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