

# QUEENIE



T·CHALMERS POTTER

ALBERT R. MANN  
LIBRARY

NEW YORK STATE COLLEGES  
OF  
AGRICULTURE AND HOME ECONOMICS

AT  
CORNELL UNIVERSITY



EVERETT FRANKLIN PHILLIPS

BEEKEEPING LIBRARY

Cornell University Library



Queenie; the autobiography of an Italian



3 1924 003 428 053

mann

4

5

**QUEENIE**  
**THE AUTOBIOGRAPHY OF AN**  
**ITALIAN QUEEN BEE**



## Cornell University Library

The original of this book is in  
the Cornell University Library.

There are no known copyright restrictions in  
the United States on the use of the text.





My Master Shows Queenie to His Little Daughter



# QUEENIE

THE AUTOBIOGRAPHY OF AN  
ITALIAN QUEEN BEE

BY  
T. CHALMERS POTTER

ILLUSTRATED

NEW YORK  
MOFFAT, YARD AND COMPANY

1911  
S

@ 6378

Copyright 1911, by  
MOFFAT, YARD AND COMPANY  
NEW YORK

---

*All Rights Reserved*

Published, February, 1911

## FOREWORD

Scarcely an incident in this monograph is founded on other than scientific knowledge of the habits of Honey-Bees, and the practical use made of them by professional or amateur Apiarists.

The *Autobiography of an Italian Queen Bee* is the effort to put into language what one naturally thinks has transpired, judging by what one knows is being repeated year after year in a colony of Honey Bees. It has grown out of a real fondness for working among bees, and observation of their wondrous ways for thirty years. It is not mere imagery. Much has been enacted before the eyes of Bee-Keepers and is already depicted in photographs. We have all but their words.

Reported conversations between the *three Orders* of bees in a colony, as noted

here, will have assent from scientific students of Apiculture, as well as the interested lover of his bees who manipulates them for pleasure, recreational diversion, or for their honey returns.

Any slight license, in order to weld the facts together in both an understanding and entertaining form, will be relished equally by those who know most about Honey-Bees, and those who know least but are also taken with the curious and awe-inspiring things that occur in the realm of *Great Nature*.

Feb. 1911.

T. C. P.

## LIST OF ILLUSTRATIONS

My Master Shows Queenie to His Little Daughter . . . . .	<i>Frontispiece</i>
	<small>FACING PAGE</small>
Portion of a Brood Comb with Queen Cells . . . . .	14
Our Object Lesson on Faith . . . . .	26
The Whole Multitude Had Missed Her in a Very Few Moments . . . . .	40
Maid, Queenie and Chap . . . . .	50
Prince Melapis Looked Love . . . . .	60
In the Rear of the University . . . . .	66
Tip End of University Queen Nursery . . . . .	78



## **PART ONE**





# QUEENIE

## AUTOBIOGRAPHY OF AN ITALIAN QUEEN BEE

### I

My birth; youth; wonderful first experiences. My formal and my pet name. My mother; my palace; my food.

**T**HIS is the name by which my intimate friends have known me, and I can not say that I dislike it, for although I am of good size I must confess that it sounds rather loving, as if I were still young, pretty, a pet, and much humored and honored. My full name, however, is Regina Melapis. I think it is high sounding and almost too long, but what is one to do about a name when one has no share in deciding what it shall be? I had none whatever. I have heard on excellent authority that most fathers and mothers agree

between themselves respecting names for their children, but my father died before I was born, and my mother informed me I must have the name she had always borne herself. In fact I now know, as the Honorable Teddy Roosevelt says, that down in East Africa there is what is known as a bull Hartebeest, and another as a cow Hartebeest, and that each has no other truly descriptive name to always designate whether it was born boy or girl Hartebeest, and that this is also true in a wide sense everywhere. Some people are called men and some are termed women, are they not? Besides, it is against all laws and all fashions for men to call themselves women, or for women to call themselves men. I am sure that some of these go by the name of males and others females, which I think comes to the same thing, except that when you talk that way you are dividing them all into two great distinct classes because of their sex. But the singular fact in the lives of my mothers and grandmothers all the

way back for hundreds of years, is that our fathers all died before we were born, and that a strange man gave us our name. It has never been changed, and you will find our racial communal name as well as some plain hints about our habits and work in the Bible, that greatest and best of all books, which carries us back farther than written history of any kind in this world goes. I said my name was high sounding and long, but I think it is pretty and without affectation. Besides, it is grand; for as you must know it is really Latin, and that is one of the most beautiful of all the languages in which people have ever spoken one to another. Moreover I happen to know that those who speak or ever learn French, Italian, Spanish, or Portuguese and their kindred dialects, are using modifications of that musical Latin language. Of course you are aware that the valuable coins of England have stamped on them the name of Edward VII, and that the little word "Rex" is just after it, because "Rex" is the

Latin for King. Very soon now they will have George V, with "Rex" following it. When Queen Victoria lived, and coins were minted, they as well as the great State documents were stamped with the words Victoria "Regina," or else "Reg.," an abbreviation of the former which means Queen. They thus perpetuate this ancient and elegant language which their predecessors spoke, wrote, and also used on their money. For these reasons, although the name "Queenie" is my familiar appellation, Regina Melapis is my great Latin name, and my mother and I were named by none of your illiterate, ill-natured, stiletto-flourishing men like those of the Black Hand, and who perhaps stab somebody if he does not give up his possessions to them, but by scholars, nature lovers and scientific men who understood the Latin language as it had been used by the savants and quality people of the sunny, beautifully hilled and blue laked land of Italy. For, I am now going to let out my secret to you. I am a Queen Bee. I mean I am a Queen

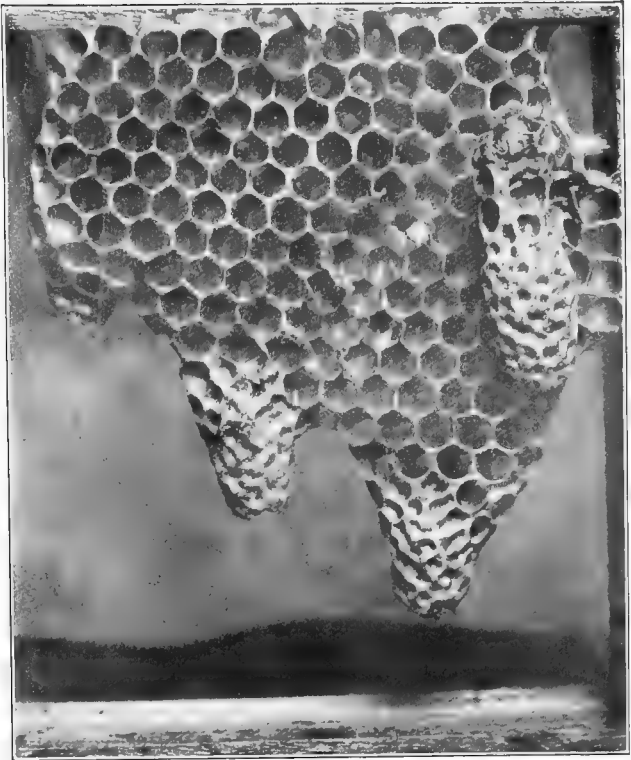
of those races that are denominated Honey Bees because they gather honey from the flowers, store it in that dainty white comb so spotless outside, and pure inside the cells, that it is known to be the purest, cleanest, and most wholesome of all natural sweets for people to eat.

“Mel” means honey and “Apis” means bee. So now you understand all about my name Regina Melapis, and that it signifies Honey Bee Queen.

The man who named me by my truly scientific and grand name was of middle height, had black hair that curled a trifle, and he had a big fierce mustache, but he was kind natured, very gentle, and his voice was full of melody to me from the time I first heard it. He was a graduate of the University of Padua, and I have heard him say he disliked to hear Latin spoken of as a dead language. I also think that is scarcely a proper way to talk, when it is lively enough to fill all those other national languages that I spoke about with such

sprightly words and phrases. Then, too, doctors everywhere write "Mel" on their prescription blanks when they wish a druggist to mix honey with the rest of the medicine in a bottle. Besides, many terms used by courts and lawyers are Latin, and written in their books and briefs, and are spoken by diplomats and judges in court rooms and elsewhere, as if they were parts of the language of 1911. A United States dollar has the Latin words "E Pluribus Unum" upon it. Each queen of Italian honey bees is still formally denominated *Regina Melapis* in Italy, as her kind always was. So Latin is not as dead as some may think.

The first thought I ever had in this busy world was when I realized that I was snugly shut up in a little six sided cell of wax, with my head quite near the wax capping of the cell, my feet and wings compactly but comfortably hugging my body, the other end of my body just touching the base of this cell. This small home in which, com-



Portion of a Brood Comb with Queen Cells. In One of These I Was Born





ing to consciousness, I found myself, was only three-eighths of an inch wide and not much longer. But I kept growing from a speck one-sixteenth of an inch in length, that first looked like a wee piece of a white grain of rice, or a little clip of white thread, into a larva, then a pupa, and afterwards showed a developing head, two long and two short wings, and six legs, beside some cunning antennæ, or feelers, that would always help me know "where I was at." The nurse bees of our colony had to make my home a little larger all the while. Accordingly they kept building on beeswax very cutely, artistically making diminutive elevations and recesses all over the outside until my cell was larger and longer than any of the others in the hive, being about seven-eighths of an inch in length. It was tapered somewhat at the end where some of my feet were, and, with all the turrets and fancy indentations, was as elegant in its way as is Buckingham Palace in which good Queen Alexandra has been so magnificently housed.

My cell, always spoken of as the Queen Cell by my loving Italian Master, looked for all the world like a hanging peanut shell, only the color of it was somewhat darker, between that of taffy and chocolate. But I have since found out that our cells are sometimes almost black when they are left on the combs of a hive by the bees for a long time, and used as the birthplace of other queens.

Well, up to this period I had never yet had any consciousness of being hungry, any more than an unborn baby has. Kind Nature, which is the same as saying a great and good Creator, had arranged that I should be supplied with all I needed in the way of food, that I might grow, be happy when I came to myself, and fulfill some divine design, which I think He has for every beast, bird, insect or man. However, since that era in my cell life I have discovered that a portion of the individuals of our colony of bees, termed Nurse Bees, who are the very young ones, put what is called Royal Jelly in the bottom of my cell im-

mediately before my mother queen had laid the tiny white egg down there, or perhaps just afterwards. She and our people knew a queen was to be raised there, because that particular, rich, sex-aiding nourishment is never deposited in any other cell to such an extent, nor permitted during the whole period of incubation as it is with those eggs that are to be matured into Queens. This is a scientific mystery, wonderful to contemplate, but Royal Jelly is known to be far richer and there is more of it than of that upon which my less illustrious relatives in the hive are reared. I fairly floated upon and in this tiny shut-in lake of nutriment. But at the time I spoke about, when I seemed to know I had the power to do thinking, I did feel hungry, as if I needed and would enjoy some food I had not yet had. Besides, I felt strong, quite suddenly, in only a very few hours. I moved all I could, and stretched my legs, and drew my wings back and forth as I could. I knew that I could hear, a consciousness I had

never had before. The wax of my cell was porous so that a trifle of air, sound and light were possible. I kept doubling up, and then thrusting up my antennæ against the closed door of my cell. Such a commotion seemed to be going on over my head, like I have since heard when raindrops patter down on the cover of my colony's hive. A kind of shuffling, scratching and hurried stamping of feet, as when my master's University pupils poured over the walk not far distant on their way to their classes. And I subsequently found that he was a Professor of Natural Philosophy and taught some classes in experimental Apiculture.

Now, therefore, craving food, and aware of rapidly increasing powers, I cried out with the only voice and language that I could muster, saying "*Cheep, Cheep, Cheep,\* ee-e-e.*" I was terrified to find that

\* It is an exact reproduction into English sound of what is known among Apiarists as "The Piping of the Queen," heard when one places an ear against the hive when swarming is soon to occur, and occasionally at other times. On

the shuffling of myriad feet above my head ceased almost instantly and a coarse, rasping voice said "*Bosh, Bosh,*" and then a very pleasant lady's voice recited what I understood to be: "Wait a little and we will let you out." Forthwith there was a scraping and gnawing, and vigorous hacking at the capping of my cell, which finally grew so thin that I could plainly discern some figures moving about and over it. At this I used my own mandibles, and, as no objection appeared to be made, I thrust lustily away, and very soon my feelers and nose began to get through, and then another lady's very sweet voice ventured: "Welcome, indeed; we are so pleased to have you. How comely you are! Maids, come quick. See what a pretty face she has, and such beautiful hair!" I could not comprehend

the contrary the cry "*Hock, Hock,*" is one of distress or defiance, uttered by a Virgin Queen not yet out of her cell, or when she is liberated from her cell, and sometimes uttered when two queens are at liberty in the colony when a battle between them may be impending. This latter sound, "*Hock, Hock,*" is commonly denominated the "*Qualking of Queens.*"

what that meant, for vanity had not ripened in me yet, tho' I soon found that decided pleasure in myself was growing fast. After this very flattering reception there quickly followed a great buzzing of wings and a general rush my way. Then I heard a voice of authority and snappy decision say: "Seal her up! Quick! She is only fourteen days old and the swarm must not leave for two days yet!" At once several headsful of mandibles were pushing gently but forcibly against my own, and I was obliged to get clear back into my cell, which was not entirely closed up again, but whose capping hung by a hinge on one side. However, it was impossible for me to get out, since four or five pairs of feet were holding the lid down, and a stream of population was passing back and forth as if on busy errands. Then I shouted again with all my breath: "*Cheep, Cheep, Cheep, ee-e-e,*" and behold some winning-toned person replied: "Why, yes, of course we will; Maids, it is time she had a Queen's first

meal." And with that a pink little rod came through under the lid! I put out my tongue and the points of both touched, and I began to draw nectar from the honey sac of one of the nurse bees. How good it did taste! Precisely what I needed, sweet and luscious, with the delicacy of clover blossoms themselves! After that full meal I actually felt like a grown young lady, strong and conscious of my looks, and, as well as I could, I began to dress my hair which grew over the sides of my temples and down around my throat. Just then some individuals got off the cell lid, and a tall magnificent looking and beautifully gowned lady came and pushed her head and arms under, and lifted it enough so that she could caress me! This touched me greatly but I have since found out that the spirit of the colony would not likely have permitted this in case she had been my sister instead of my mother. I looked out at her and perceived that her hair, arms, face and elongated body were precisely like mine. She was leather

colored, which is our true one if we are high-bred, had three yellow bands across her back, and her body lengthened out so gracefully over the adjoining cells that my responsive admiration scarcely knew bounds. Stroking me affectionately, she softly began to cry, if I say it in English, "*Queen, Queen, Queenie, ee-e-e!* That is your name and you are my daughter. I dearly love and am proud of you, but the spirit of the hive knows but one punishment for every infringement of its instinctive rules, and that is death. You will be of age in two days and the law is that then, or about then, your mother must lead out a swarm of most of the adult individuals of this colony. Should I not do so, they will supercede by killing me, and if I, or you, or any of the others offend against the swarm-impulse and you should come out of your cell before I have led out the swarm to a new home, then I must myself sting you to death, or command that you be smothered to death, lest the beneficent designs of gracious Nature be



contravened. This is all I can say. You will live to see how righteous, benevolent, and promotive of happiness and profit for us and our Masters our colony laws all are. Good-by, my sweet young daughter. Remember your name. The rest you must find out for yourself, and it will all come readily, since the involuntary promptings of instinct arrive without observation, as our bodies grow without our seeing or knowing it. Touch my tongue. There; once more good-by. *Queen, Queen, Queenie, ee-e-e.*" And she was gone! I did not sorrow. Some way that was not in my nature. I was just full of wonder, and strange expectation about some great destiny! But I then knew that what I thought was "*Cheep, Cheep-e,*" was really "*Queen, Queenie,*" and, being just a young lady, I liked the last best and thought of myself that way ever afterwards. It all seemed a very strange charge to me, but I did not seriously question, and soon fell to having only a slight curiosity about it, for I pre-

sume the good Creator has ordained that each division of Nature shall quickly become familiar and contented with its own rules and penalties.

After two days of quiet resignation to my enforced position in my cell, growing stronger, and wishing to brush my hair and stretch my legs and wings better than I could when thus confined, I was conscious that there was an ominous silence all through our hive. The lid was being pressed down tighter all the time with more weight upon it. Through the lid, which some appeared to be scraping thinner again, I saw feet, feet, and feet. It was very warm, too. The temperature stood steadily at ninety-eight or ninety-nine degrees Fahrenheit. Everybody seemed to have come indoors. Few were going out. Those who did go were Maids, whom the spirit of the colony said should never marry, but live and die the happiest of working and laughing people. Nobody paid any attention to them

for they were just learning to go about some, and test their powers of gathering and enduring the journey home with what they had found of nectar, pollen, or water. I was yet to realize what would become of all our people who had started early in the morning for the harvest field in case anything happened before they returned with their loads. All of a sudden, on my sixteenth day, two days after my strangely loving mother had both petted and warned me about breaking any of Nature's laws for Honey Bees which the Creator of all had inexorably established, I was surprised to hear my mother's voice again. But oh! how changed! The same words as before, that is, speaking my name, but a good deal more added. For, after first hearing my name in a very loving but rather regretful tone, she changed the pitch of her voice. It now sounded as if she were wrought up to the highest degree of enthusiasm and conscious sovereignty. What she said was like a military or triumphant address to soldiers

when going into battle, or some stirring exhortation to undertake a crusade, or enter upon a pilgrimage. I thought I could hardly wait until it was all finished. An ecstasy possessed me, and I wished I could bound out of my cell and take part in what I was sure was going on. What she said, written into English, was this: "Hail! Hail! The day has come! All colonists to wing! The air, the glorious air. Come, come! Away we go! To wing, to wing! Sentinels, lead the way! Let everyone praise Providence through the spirit of the hive! To wing! Instant wing! *Cheep, Cheep, Cheep, ee-e-e!*"

This militant utterance finished, I tremblingly awaited the result, scarcely apprehending what it all could mean. But hardly had my mother's excited royal voice ceased to ring throughout the hive, before a vast multitude of fifty thousand of my fellow beings began to go pell-mell towards the entrance of the hive. Only the few that held down the hinged lid of my cell seemed to



Our Object Lesson on Faith  
Fifty Thousand of My Mother's Family Are Preaching  
It Before Your Eyes



brace themselves to obey some exhortation to remain. Tumbling, boiling, racing, buzzing, hurrying over each others' bodies, that mass simply poured itself out, even spilling itself in writhing fashion on the ground in front, in the impetuous impulse to obey the Creator's command through the leadership of my mother. As rapidly as these thousands reached the door of the hive, or fell on the ground below, they took wing. Zig-zagging, circling back and forth, darting in bee-lines here and there as if wild, angry, exultant, or in bewildered, hopeless confusion, two hundred thousand wings were making a strange music in the air just above the hive, that I could distinctly hear, still confined to my cell as I was. Frequently a buzzing at the entrance and scratching feet told of the return of some who had been warned to come back and keep watch over our brood of forty thousand young Chaps and Maids, who were in all stages of development in their cells scattered through ten frames of comb in the brood nest, many

thousands of whom, being my departed mother's last deposited eggs, would not mature for twenty-one and thirty-six days, the Maids and Chaps respectively. Sometimes I heard "*Bosh, Bosh,*" again. Then the noise of that vast aggregation outside in the air grew fainter, and fainter, until I could discern no more of it, and my intuition told me that the swarm had settled on some small tree, perhaps only about twenty feet distant from the old hive. As I have learned about some other people who migrated from one land to another after having secured food, utensils and valuables to provision themselves for their journey, so now our bee people did this same thing on a miniature scale, and with just as much certainty of success in their trustful undertaking. For, every individual Maid had carried a honey sack completely filled with honey, for the emergency of secreting wax for new honeycombs, and of awaiting, maybe, the pleasure of some kindly disposed man or woman who would supply the swarm a new hive with



ten old frames of comb, or else ten starters, or ten full sheets of beeswax comb foundation as bases for new combs. And where was my mother, the leading exponent of this spirit of the hive? Was she in the center of that great pear-shaped bunch of bees, larger than a big ham, hanging from that branch? How quiet they are. How they have trusted Providence for their future! The Creator gives to all their meat in due season.



## PART TWO



# QUEENIE

## II

I become Mistress of a Colony of Bees of my own. My reception and exalted position. The Address of Welcome. Prince Melapis. The Chaps and the Maids. The three Orders. "Hock, Hock," I am defied. I meet and vanquish a rival Queen. I have no moral nature.

**A** SHORT time after this, I seemed to feel our home moving somewhat, as if it were being shoved along the hive-stand, and scraping on something rough. This only lasted a moment, however, and I wondered what was the matter. Suddenly I heard a great stampede and fluffing of wings, and at first thought my mother and her swarm were coming back to our home, but I soon made up my mind that the uproar was at the entrance of a new hive a few inches away from ours.

I heard tramping of feet, and voices near, and finally my Master's wife and little

daughter came, and I heard the former say, "Have you found her?" To this he replied that he had not, but I still heard and felt his steps on the grass, and finally he said with considerable exultation in his tone: "Here she is, the beauty! Look at her before I let her run in." To this the lady added with much delight: "*Queenie, Queenie*, are you not pretty! Papa, will she sting?" He then imparted the information that a Queen of Honey Bees was armed with a sting, shaped like a curved carving knife, but that she used her weapon only on a rival Queen, never on a human. Now, the facts were that my Master took no risks about absconding swarms in case of his absence when they emerged, and their final departure for some hollow forest tree, and that my mother's wings had been shorn on one side of her shoulders so that she could not fly. A little trial and she would sink to the ground! She was not in that bunch of bees at all! She was down in the grass only a yard distant. The whole multitude

had missed her in a very few moments and in consternation returned to the old spot, where they found my Master had placed a new hive, ours having been moved a short distance to one side as I have intimated. Into that they poured, as anxiously as they had gone out before, and apparently in the greatest haste. My mother was put at the entrance and allowed to crawl from my Master's fingers in and up among her old colonists, but in brand new quarters, with small starters of comb foundation fastened to the top bars of the brood frames, instead of the old combs full of eggs, bees and honey, which were now in my possession. Thus they were obliged to build completely new comb before she could have any cells in which to lay eggs, and the returning field-workers would be obliged to put all the honey they gathered for the present into the pound section boxes in the super or honey crate that formerly was on my hive, but now placed over on hers. This would insure a fine harvest of surplus honey for my

Master, but retard the hatching of bees to such an extent that my mother would not be at all likely to lead out another swarm that season. And they did complete over one hundred pounds of luscious comb honey that summer, in sections holding about one pound each.

Meanwhile, I wondered why I had been left with so few bees. But some from the fields, absent when the swarm went out, allured by the old colony scent, since each one has its own, came into the old familiarly scented entrance and so upon the old combs again. Presently I became assured that with myriads of young bees hatching out at the rate of three thousand a day, we should soon be populous again. The sun shone bright and warm, as it does to glorious perfection in Italy, and the old hive was warm enough. Not one egg or larva chilled or died. In a few days I was the adored royal head of a rapidly increasing colony, and was as full of youthful spirits and hopes as



any highly bred young lady could possibly be.

Now then, it did not remain so tranquil very long. We must be rightly named "busy bees," for with us there is perpetually something doing that is worth while, either outside or inside the hive, or both. That is, of course, excepting when we take our rest and sleep in winter, as other people take theirs, tho' perhaps not at the same time or in the same way. So, in a little while I could discern much walking about, which grew more distinct until, tho' I knew that swarm must have been a large one, I felt certain that there was a good remnant of individuals to perpetuate the interests of my colony. As already suggested, I ascertained that a few thousands had, as adult workers, been absent in the fields, gathering nectar from clover blossoms. These were now returning home heavily laden, and all work went on as before except that, for the time being, there were not as many harvesters. Quite often I heard

something like a great hoarse flapping of wings down at the entrance, and as it came up it sounded to me like someone rattling bones that had leather strips bound to them to deaden the noise as they struck each other. The tread of some people's feet appeared heavy, as if they had burdock burrs on the soles of them, and again I heard that fearsome, imperious "*Bosh, Bosh,*" and was frightened. But in a little while I heard my relatives talking again about releasing me, saying that although several days sometimes elapsed after a swarm had issued before a new Queen was ready to emerge, I was mature, self-reliant, beautiful to look upon, and the sooner I was placed in charge the better for the welfare of the colony, considerably reduced in numbers as it now was. After some further whispering, and standing stock still on the lid of my cell, as Professors on the University campus silently stand sometimes while they are meditating the settlement of some momentous interest, and yet wait for somebody to

lead, they all moved off a short distance away on the comb. I took this as a challenge to my strength and self-confidence, and so anxious was I to get out that straightway I made bold to push up against the lid, which slowly rose upon its hinge, and I crawled out upon the plateau of adjoining brood cells. At once everyone turned about to face and reverently salute me. Then one of the Maids slowly walked forward and most deferentially drawing her head down upon the surface of the comb and smoothing back her hair with her antennæ, lengthily greeted me thus: "Most fair and gracious Majesty, your august Mother, our late honored Sovereign, obeying an instinctive inspiration from the Almighty Creator of all things great and small, has left this home to found another like it, that our colony may contribute its share in obeying the law to be fruitful and multiply, replenish the earth, make glad the heart of man, and aid in the completion of the wonderful designs of the All Wise.

Her late august Majesty spoke to you in the night seasons, and caressed you in our presence, affectionately witnessing before us to your Serene Highness as her successor. She acquainted you with your name, and told you of the mysterious vital disposition of our race. We have obeyed her to her very latest charge, not alone for fear of penalty, but also because we revere the spirit of the colony, which to us is the spontaneous, unspoken, but authoritative voice of the Almighty. We now salute you as our Royal Highness, whose beauty equals that of any exalted Princess of our kind, whose grace shall ever increase, whose sway is supreme over all this colony, and whose will it shall be our happy duty to obey both in letter and in spirit as long as we shall live. Adorable and gentle Sovereign, be you the mother of thousands of millions, and may your children possess the gate of them that ever vilify or dispute you! Fellow Colonists, salute and pay homage to our henceforth glorious Majesty, the sovereign Queen of



The Whole Multitude Had Missed Her in a Very Few Moments, and in Consternation Returned to the Old Spot



this line-bred colony of Italian Honey Bees!"

As if by concerted inspiration there was, forthwith, a great commotion, made by bowing, scraping, shaking of bodies, buzzing of wings, and a blended confusion of utterances, above the din of which I discerned "*Bosh, Bosh,*" and "*Hock, Hock,*" and "*Queen, Queenie, ee-e-e.*" This subsiding decorously, in due time, all sped gallantly to me, and some began to give me their tongues that I might delight myself in drawing fresh nectar from their honey sacs. Others fell to stroking my hair, grooming my body, unhooking and rehooking my upper and nether wings, smoothing the fur of the yellow bands on my back, rubbing down my legs and feet, and patting my head with their antennæ. This done, and while I was meditating upon my new and exalted heritage and responsibility, silently deciding what I should do first, I heard an individual "*Bosh, Bosh,*" and a ponderous stamping

of feet, and a heavy set, imperious, magnificent youthful specimen of my order came stalking towards me, with a stately carriage of his frame that charmed me. He had a large and fine looking head, with three great bright eyes in the center of his forehead that looked as large as I have since thought my Master's shirt studs were, whereas my own three principal eyes were at the very crown of my head, protected by tufts of hair through which I could look at him as coquettishly as I pleased, and, because they were thus hidden, I did not feel as much abashed as I otherwise would have been. Then, also, he had two gorgeous oval crescents, as if dainty shad roe had grown gracefully up his cheeks and they met in a pretty groove at the top of his head, which thus made an imposing "part" there, as fine as Lord Dundreary's. These plump crescents were packed full of the brightest and most expressive eyes, hundreds of them. He had short and somewhat delicate mandibles, not even as large as mine, as if he



had never been born to servitude or defense, but to be waited upon as princes are, and they were quite ambushed by a silky mustache and goatee which were as illustrious in grooming and aspect as those of a high caste Chinese Mandarin. He urged some Maids aside rather unceremoniously, but I could not think him impolite, for I now believe I naturally doted upon a becoming conceit and brusqueness in one whose physical construction and mien bespoke handsome masculinity as well as impressive strength of character. As this noble being neared me I admired him instantly as if I had been born to do so, and inquired of a Maid who and what this grand personage might be. "His name is Chap," said she. "He is a Prince of Melapis, a line-bred Italian Drone. We call them all Chaps. We are Maids. We had over a thousand Chaps before the swarm issued, but at present there are only a few who were too young to go with the rest. We shall very soon have more. By to-morrow, perhaps hun-

dreds shall have hatched from those humped cells over there. See?"

This information gave me the clue to a release from my quiet embarrassment of attentions, and immediately I moved towards the big table-land of Drone cells. If you believe it, every fellow colonist made gallant way for me, some going backward, some forward, some with a sidewise, hesitating gait, all heads practically turned towards me. I may as well say that some people are fulsome about our colony etiquette, speaking excessively of the way in which we treat our Sovereign in every colony, but I never have been denied some token of special notice from one or more near me as I went my rounds from cell to cell, and I have interpreted it as a combination of adoration for my sex and wonderment because I could do what no one else among all our thousands could possibly do.

When I reached the elevated area of Drone cells, it was as if I had to crawl over a lot of jelly glasses turned upside down.

I explored them solicitously. The tops of some of these arched cells were being thinned by scraping within and without, and some were loose like my own had once been, holding only by the hinge. From under these lids the feelers of hundreds of Chaps were being thrust out, and some had all their thorax above the crest. I immensely admired them as far as I could see their bodies and discern their manners, and wee little voices were trying to say "*Bosh, Bosh,*" from now on faster and faster all the while. As I leisurely crept around in my curiosity to explore those combs of hatching brood, I found more and more adult Maids who had returned from the fields, besides some who had just made their first trip out and back, and both were pumping nectar from their honey sacs into cells that were either partly filled or empty. I saw literally thousands of capped over cells out of which hosts of Maids were trying to emerge, just as the Chaps were doing, and thousands also that had new little white eggs in them recently,

left there by my mother, besides larvæ in all stages of development.

It was at this period of my youthful maturity, when I was able to do good thinking, that I got hold of three colony facts, and I must tell you about them, for they greatly aid in figuring out the spirit of our hive, besides kindling praises of the heart over the mysteries and surpassing wonders of intricate Nature, which indeed work better than all the machinery of the great clock on the cathedral of Milan, with never a chime or a cuckoo to ask demonstrative attention. One is, that however handsome the Chaps, that is to say the Drones are, it is more wonderful still that they are the only purely male bees, and that they are the direct sires of all Queens and Maids, indirectly so of other Drones, since Maids may possibly lay eggs, but their eggs will only beget Drones. The colony and the race would become extinct without Queens and Drones, although the Maids, from the

standpoint of workers, are the most important personages of our order. To be sires is the sole object of the Chaps' creation. The second fact is, that the very great majority of all the thousands of bees hatched in our colony are the Maids, that is the Worker bees, and they are what my Master calls imperfect females, so that they never are married, but give themselves entirely to the nursing of young bees, gathering honey, and supplying the chief share of the necessary warmth of the colony, which as I intimated before, must be at blood heat or over, at least among the brood combs when a brood is being reared. I have already affirmed my belief that a benevolent Creator made us, and purposed our peculiar kind of colony inspiration, as He has created all beings and things and foreordained their design. But I also believe that by searching no one has found Him out completely, known His mind nor been His counselor, for there are hosts of secret things and these all belong to Him. One of the mysterious

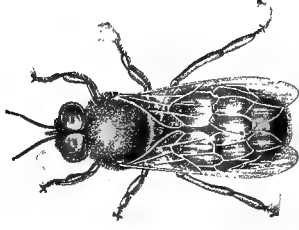
things about these Maids is, that very occasionally they think to help their Queen lay eggs in the height of the hatching season, when numbers and heat are very essential; or else in some desperate desire to be wise above all colony law, they think to provide it with a Queen when its sovereign has been overtaken by some accident and is lost, or dead. But not one egg ever hatches into either a Worker or a Queen, since all are unfertile. Only Drones and our colony would be doomed! The third fact is, that just as the Chaps or Drones are the only pure male bees, the Queen is the only pure female. She alone can marry. She alone can lay eggs that are fertile, so that from eggs she does deposit in the cells the colony may develop Workers, Drones, or Queens, according as she has impregnated them when laid, and as the colony purpose demands at the time by giving or withholding certain kinds of food, such as Chyle and Royal Jelly, and also building three sizes

of cells to suit each size, shape, and kind of bee, as the case may be.

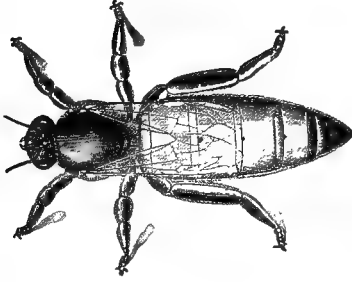
Well, as I was thus wandering about, seriously considering all that was fast entering my vigorous young mind, what should I suddenly hear but that queer noise that I had distinguished only once before, namely "*Hock! Hock!*" It seemed strangely harsh, and as it was repeated every now and then, I detected from what direction it came, and took my way towards that part of the hive. As I went up and down or across the brood frames, attended by my escort of Maids and Chaps, who leisurely followed me wherever I went, that sound grew louder and more severe in its note. I saw ominous glances on the faces of my attendants, as if they thought it lay with me what was to be done. I first grew apprehensive, and then very angry. My passion came spontaneously and I was conscious of no wrong impulses. It was simply ordained nature. I

rushed forward until I was at the door of the cell from which issued that ugly sound. It was partly opened, but some Maids were holding it so that its occupant could not escape. I instantly saw that another Queen Bee was in there! There could be no mistake. It was a regulation Queen cell, similar to the one in which I had been born. Her voice was one of daring! It sounded impudent, and to me was odious in the extreme. My indignation knew no bounds. I was first on the scene, an extended address of royal welcome had been delivered to me and I had already taken possession of the colony palace. I reasoned that if I had died in my cell there might be very good excuse for having another Queen in readiness. Precaution had doubtless been taken in view of some possible accident to me, and I saw the point to this measure. But now my course was clear. I should and would tolerate no rival. I gave the order to tear her cell down and to fall upon her. With madness that only an affronted Queen can in-

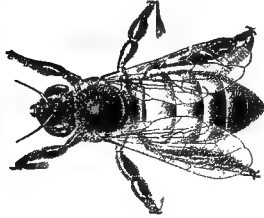




Chap



Queenie



Maid



‘dulge toward a rival, I myself rushed upon her exposed thorax as the walls of her cell gave way, bent my body for a supreme effort and sent my curved sting into her vitals. She trembled, arrogantly cried “*Hock, Hock!*” and then straightened out dead. As I beheld her thus, I felt no compunction. With surprising complacency and deliberation the Maids all about on the near combs tugged away, until the following morning she had been drawn out of the cell, her body unmutilated in any way, dragged down and dropped over the edge of the alighting board, and dumped on the grass for a toad to harpoon or for the ants to devour. For we are painstaking about our habitation, and scrupulous about cleanliness and the public health. In case of death within doors, the chilling of any brood which in time might be offensive, the capture of a moth miller or moth worm, a leaf, twig, or any bit of refuse being blown into our quarters—we at once set about to remove them, and they will be found on the ground

below our front door, and indeed many such things disappear as by magic, being carried yards, even long distances away, if they are not too bulky or heavy. Now, in this whole case I was satisfied. I believed I had carried out the benign and wise adaptation of nature. Although I had slain her, I believed she had no capacity to suffer bodily pain. I could not discern that I had any myself, nor learn that any of our race had. We could be killed without suffering, similarly as many small insects and some of the lower forms of life are known to have no power to suffer. I was now a Sovereign indeed. I mused for eight days and then a new and remarkable sensation took possession of me. It came about this way:

## PART THREE



# QUEENIE

## III

I fall in love. Honey-Bee sophistry and gallantries. I copy Queen Victoria and Queen Wilhelmina. My engagement. My marriage, and wedding journey to the clouds and back in seven minutes. My handsome Prince dies. My Master is tempted. I am sold.

**T**HAT handsome and courtly Prince Melapis, that particular prince among a regiment of Chaps that was soon in evidence in our colony, but upon whom my maiden eyes had already passed judgment as to what masculine illustriousness, dignity, fine appearance and alluring characteristics in the Italian Honey Bee world were, began to have an indescribable attraction for me. I tried not to be unladylike or presumptive, but I could do no otherwise than betray my adoration of him above all the other Chaps of the colony. In short, I wished to marry him alone and deliber-

ately, and as I thought circumspectly, set about to plan for my wedding in accordance with customs that obtain among solitary Princesses unattached at the time of their accession to Royal prerogatives. I had heard my Master tell his wife that he wondered with whom I would mate, and I was well aware of my privilege of selecting a husband, it not being expected of such as I was that I could first be approached on the subject of marriage. So, when I saw love beaming from the multitudinous eyes of this elegant Prince, too polite to do otherwise than to gallantly venture courtship sophistries as we walked along on the combs, I was not taken by surprise when he heart-feltly said: "Your Majesty, yours is a magnificent dominion. Honored and happy will the Consort be who shares with you its administration!" Made ready for what my only reply could be by all that had agitated my mind of late, and knowing well what my subjects expected of me, I put on my boldest look, and although conscious that I was



trembling, said, out of a genuinely joyous heart: "Sir Prince, it is all at your service. I wish to share it with no one but your Excellency. If you thus agree to forward forthwith the spirit of the colony, I shall wed you this very afternoon. And we shall fly to the clouds on our honeymoon journey." Several of my attendants had discreetly fallen to the rear, out of hearing of this almost inaudible exchange of lovers' language, but my principal Maid-in-waiting stood just back of me smoothing the furry rings of my yellow gown, with an assumed indifference to all that was transpiring, not even indicating any emotion when Prince Melapis strode triumphantly forward to kiss my face, stroke my hair, fondle my head with his mandibles, and finally to draw his great mustache tenderly across my cheeks.

We were quietly married in the presence of my retinue of Maids-in-waiting, and, carrying out a secret compact lest the colony should miss me, we leisurely went down to the entrance of the hive, from which I in-

differently flew first to try my double wings, and to mark the location of our hive. I took pains to observe, however, that my Master's eyes were upon me, and very restlessly, too. Also that he had his watch in his hand as if he had very soon to catch a train, but what I wondered at was that he kept glancing back and forth between me and his timepiece. I went only a few feet distant, repeating this several times, in circuits a little larger each time, and all unheeded as I thought by the throngs of Maids and Chaps hurriedly passing to and fro upon their errands, or gamboling about in front of our home with a joyous humming of their wings. When finally persuaded that no one was paying any special attention to us, I returned to the Prince's side on the alighting step, where he patiently awaited my coming, suffused myself with all the colony odor I had the racial potentiality to emit, and speedily sailed aloft in ever widening circles, closely followed by my royal fiancé. Fiercely I soared away,

higher and higher, for a while distancing my companion, because I was going upward with all my might, while he was feigning unconcern over my departure, and yet steadily continuing in my direction. My lavish waste of the colony scent came near undoing all our honeymoon plans, I think; for, before the Prince had overtaken me I looked back to see where he was, and beheld with consternation hundreds of Chaps furiously pursuing us. The Creator has endowed us with not only many eyes, but fixed in them a magnifying power, so that we are able to clearly distinguish objects at great distances, besides also placing a multitude of olfactory nerves in our antennæ, so that we may not only readily find flowers afar off, but each other as well. Drone bees can fly with greater rapidity than either Queens or Workers, and urged to all his strength by the vision of that aggregate of Chaps, his rivals, some of whom appeared to be of a different color and belonged to another apiary than ours, and excited by his affec-

tion for me, as well as by the colony scent wafted to him in my wake, Prince Melapis flew like the wind, soon caught and bore me in his strong arms higher and still higher, until at last we were above the regions of the air where the common bird enemies of Honey Bees are. Since Queen Bees seldom live longer than four years, Drones not longer than six months, the Workers not more than two months during the honey-storing season, time periods with our race are very brief. In less than four minutes, having gone to the fringe of the summer clouds at the rate of a mile a minute, our strength was exhausted and we allowed ourselves to slowly descend towards the earth, parachute fashion, my Prince spreading his wings indolently, to catch the air and prevent our downward journey being too rapid. This travel without effort was soothing, especially since the legion of Chaps had disappeared, and not a King Bird, Martin, or Passerine had been seen or heard. But the first thing I knew, we had reached the



Prince Melaplis Looked Love  
from His Great Shad-roo Eyes, While One of My Maids-in-Waiting  
Nonchalantly Smoothed the Furry Rings of my Yellow Gown



ground and sunken down into the meshes of clover and grass in a pasture at one side of the University grounds. The shock of suddenly lodging thus, aroused me to meditating over our distance from home, which indeed was not far, but I was at once terrified by observing a Mediterranean Thrush on the fence a few rods away. Now, when this bird turned his head ominously in our direction, and his black bead eyes seemed to be upon us, and I saw what a long sharp bill he had, my instinct told me he was no friend to Honey Bees, and that we must instantly escape to the shelter of home. In desperation I freed myself from the arms of my strong and handsome Prince, who was strangely still, and seemed cold and unable to move. Telling him of danger and to make all possible haste to reach the hive, I disengaged myself from the strands of grass, sped in a bee-line, and in a few seconds was on the alighting step of our hive. My Master and his wife both saw me arrive, and his hand went instantly into a pocket after his

watch. "She has been mated," he calmly said. "Where is her Mate?" she asked. "Dead! But busied with her new duties of motherhood she will neither know nor mourn. The instinct of the hive saves them from grief, and promotes the joyful continuance and welfare of the colony life. She has been absent just seven minutes."

Almost immediately after my safe arrival, that is, within four or five hours, my nature urged me to begin my life work of laying eggs, and to haste to make up for the period which had elapsed in the hive since my mother's last eggs were deposited, during which time none had been laid. Cells were being rapidly emptied by emerging bees at the rate of about three thousand a day. Thus I fell to replacing these at practically the same daily rate. My method was to travel from cell to cell. A glance into one told whether an egg had already been deposited there. In case not, I grasped one edge of the cell with my fore



legs, drew my long body under me until it was the shape of a sickle, thrust my abdomen down into it, and, by a marvelous provision of my nature, dexterously glued a tiny egg to the bottom of that cell, similarly as the botfly has been endowed with ability to thus secure her eggs to a horse's hair. But our fastening is not so tenacious as that, since it need not be, but is sufficiently so, as that if our hive were blown over or upset by some accident, not one egg would be dislodged.

Now, after I had been thus diligent for several days filling up the gaps in the brood nest, I heard my Master telling his wife, who was frequently his associate and an interested spectator at the apiary, that "he did dislike to part with me at any price." She replied that she thought the price was fine, compared with that for which many other Queens were marketed, which I then learned was from one to five dollars, according to the particular strain of their extraction, size, beauty, and the reputation of the

apiarist. "Where did you say the order for her came from?" "From that big concern in America, termed 'Home of the Honey Bees.' Money is not the special object, it seems. They wish quality, and will pay for it. I suppose I really will send her, but I must wait until I can guarantee her a Tested Queen, whose progeny show line-bred marks of three yellow bands. Yes, I will accept Mr. Air's offer of twenty-five dollars for her. It is more than I can get here, and I shall be pleased to exhibit to that firm what my strain of Italian Honey Bees shows in color, size, hardiness, gentleness, and honey-gathering proclivities. I will write them to-day that she will be mailed as soon as I can declare the purity of her bees. You know they will be seen on the twenty-first day after the one on which she began to lay."

I listened to all this wonderingly. I was accustomed to hearing about being pretty from the standpoint of the breeder of Italian Honey Bee Queens, could see my

own tell-tale bands of yellow over my back, knew that the instinct for diligence was apparent all about me, as well as that my Master's little girl could point me out on an exposed comb any day, and that her little face and arms were never stung. He himself loved to withdraw my comb from the hive and watch me as I moved along from cell to cell, laying eggs before his eyes. In our long, aristocratic propagation in his apiary, vicious and defective characteristics had, by selection been practically bred out of us, as well as others bred in. I guess this to be the reason that famous Air Company wished a Queen like me to head their great apiary, which furnishes to Bee Keepers the world over upwards of three thousand Italian Honey Bee Queens every year.

It was on the twenty-first day after my first eggs had been deposited, when my own bees were emerging at the rate of five or six every minute, and it had been found that there was no admixture of blood in my progeny except the finest Italian, derived

from their sire, the grand Prince Melapis, and from myself, descended through generations of pure Italian Queens and Drones, that my Master's little girl once more pointed me out to him whose eyes were already upon me, saying excitedly, "Here she is, papa. Poor little Queenie, to have to travel so far and be shut up in a mail bag! Will she smother, or get homesick, or sea sick? Papa, don't send poor Queenie away!" But when he informed her I needed very little air, would be snug and safe in the great mail pouches, had no nature to be homesick and could not be rocked into sea sickness, she said she was sorry never to see me again, but would be content if my Master was, and finally bid me good-by in a very sweet way. Forthwith, he picked me up with the thumb and first finger of his left hand, drew from his pocket a pair of dainty scissors, such as he frequently used for this purpose, clipped off the most of my wings on one side, and tucked



In the Rear of the University  
Not Far from the Apiary—The Fence Whereon  
Perched the Mediterranean Thrush



me head foremost into a small aperture, the opening into the end of a Queen Cage. This consisted of a solid block of light wood, having three circular machine-cut holes bored into its flat surface, for all the world like ships' portholes, close up against each other, a diminutive door leading from each to the other, so that one bee at a time could go through from one compartment to another, thus traveling the whole length of the mailing cage. The whole top surface had wire cloth tacked over it. Into one end-section was bored a tiny air hole, covered over with screen wire cloth, and along one side was a sawed slot for a like purpose, but too narrow for any bee to go through. The compartment at the opposite end was almost filled with candy, made of honey and confectioners' sugar, kneaded together until about the consistency of putty. It makes satisfactory food for us, keeps a long time without getting hard, does not run, and can neither smear the occupants of the cage, nor

the mail or mail bags. A bit of pasteboard is tacked over the outside opening into this candy-provisioned end. You will soon understand how useful this piece of pasteboard is.



## **PART IV.**



# QUEENIE

## IV

I am put into a Queen Cage. Ten companions are provided. I cross the ocean to America. I am "introduced," and acquire a new Colony-scent. My new American Masters. My Colony's honey in one year. American apiarian strategy. I become the "mother of thousands of millions." My farewell counsel to agriculturists, orchardists, nature lovers and everybody else.

**T**HE weather was warm and my master decided he would put ten Worker bees with me in the cage, whose body heat would serve to maintain us in comfort, and who would feed me after they had first sipped the honey into their sacs and could pass it to me from their tongues. Had it been cooler weather, he would have caged as many as twenty to go with me. This is the way he did: While a Worker had her head in a cell, pumping honey into it from her honey sac, he grasped her by the wings

and thorax skillfully, and tucked her into the entrance, putting his thumb over it while he did likewise with another, until he had all I needed for company and attentions on my voyage. Then, with wee wire nails he tacked a thin veneer lid over the wire cloth. We were secure, had sufficient air, were warm enough, and were out of the sight of curious mail distributors. Printed on this lid, in conspicuous black letters, was this:

**QUEEN BEE: DELIVER QUICK.**

In a space just below for the address and destination, was written this: *The Air Company, Medina, Ohio, U. S. A.*

In less than two weeks after my Master gave me to the Post Office authorities in Italy, the land of my birth, I was handed out from the Post Office window in America, with other mail from various quarters at home and abroad. For my new Masters did not only a great business in rearing Honey Bee Queens, but the most extensive

one in the world in Bee Keepers' Supplies, including vast quantities of both comb and extracted honey, as well as one hundred tons of pure beeswax every year, out of which to make comb-foundation, a full description of which does not naturally come in this outline of my life experiences as an Italian Queen Bee. I can only say it is almost as thin as paper, the hexagonal bases of cells printed on or into sheets of it, by dies, after it has been run through great steel rolls. We simply draw this out into full sized cells, whose walls are thin as onion skin. Thus, the wax furnished us, we waste no time in secreting the amount of beeswax necessary for brood or honey comb, and our energies may be forcefully given entirely to storing honey. In the honey harvesting industry, this is as great a strategem to get us to do our best as is any labor saving device among human workers. Aided in this manner, a good colony of Italian Bees will store from thirty to two hundred pound-sections of comb honey each summer, according to

the excellence of the bees, the season, the location, and the care given them.

I had to be "introduced" to the colony in America, which had been made ready for me by removing its Queen, and leaving it queenless for forty-eight hours: Discovery of their loss, helplessness, would facilitate their willingness to accept me. But caution had to be observed, and so this is what they did: I and my companions, in the cage, were suspended in the hive between two of the brood frames, spread somewhat to make room for it, the design being that, confined there, we should acquire the colony scent. If this well understood precaution had not been taken, we should all have been instantly stung to death as enemies. But left thus for forty-eight hours, my Masters then opened the hive, saw that the colonists were by this time peacefully overspreading the cage, and looking into it as if ready to welcome the Sovereign they well enough discerned was so near to them

but could not get to them. They then took out the tacks that held down the pasteboard slip outside, over the honey candy, removed it, put the cage back as before and shut up the colony. The pasteboard gone, the Maids at once began to eat out the candy to get through into a compartment and liberate me, and they finished the task in a very few hours. The tiniest hole at first, through which came a pink little thread of a tongue! I knew it meant a friendly kiss and a sip of honey fresh from the flowers, and I gave and took both. Soon a head and then a body through, greetings were extended, and such gratitude that they had a Queen again, that I was right away at home, and set about my business of laying eggs. During the interregnum, the Maids had started many Queen Cells, to make sure in due time to replace my predecessor. These I myself soon tore down, as mistress, with much the same spirit I showed in the old land when I found a Virgin Queen about to emerge from a cell after I had been proclaimed.

My new Masters observed me closely, opening my hive occasionally to be certain of my presence, ascertain if I were a vigorous layer, if my bees were gentle, if we were producing honey rapidly, and capping it in a superior manner. They knew their business as well as we knew ours. When my colony became so populous that my instinct suggested to me the propriety of soon leading out a swarm, as my royal mother had done in Italy, the Maids began upon Queen Cells. This was evidence of what my purposes were, and my Masters determined to frustrate them and oblige us to use the spirit of the colony in a direction more to their advantage, similarly as people harness horses to get loads hauled, use mill wheels to secure the power of water, or as directors manage the energies of laborers so that more and better work may be accomplished than if they followed less effective methods. So then, they cut out these Queen Cells, gave us additional room by putting more honey sections over our



brood nest, and during a hot spell they helped us to comfort, and contentment with our quarters, by putting little blocks under our brood nest to raise it up two inches from the bottom board and permit abundance of fresh air to reach us. Every week or so, as we had partly finished a super of thirty-two sections of honey, they raised it up and put another under it, until we thus had six supers over us, in all of which we were storing the most delicious comb honey. Finally, the first one, now at the top, was found completed. They removed it, and I heard them talking about it, saying it was beautiful to behold, almost too pretty to sell at any price. One by one the topmost super was taken off, equally finished, but as the honey season waned, they put on no more, lest we should have too many boxes to fill and finish to perfection. They thus adroitly had gotten us to do our best in honey storing and could advertise our known qualities if they chose. If they had allowed us to reduce our work-

ing force by swarming, we could not have harvested for them what we did. We had filled and capped six supers of thirty-two sections each, which made one hundred and ninety-two pounds in one-pound sections. This, I overheard them say, was doing first rate, but have since learned that although this quantity is above an average yield of one colony, even when Italian Bees are manipulated by experts, there are many localities where the climate and flora permit of colonies securing more, and considerably more if they are regulated for the production of extracted honey, in which case we are suffered to spend no time, nor waste any nectar, in secreting wax, except the very small quantity utilized in capping honey. For, when extracted instead of comb honey is the object, previously built combs are continuously furnished us, and all we have to do is to store and seal our product. Our combs are then removed, the capping shaved off with a specially shaped knife which has been dipped in hot water, the frames set



Tip End of University Queen Nursery

A Hot Day in Late Fall, 1910, When Rearing Had Ceased and Lawn Mowers  
Were Called Off



into a revolving machine fitted with wire baskets to hold them, and the honey is thrown out of the cells against the sides, runs down and through a faucet into cases in which it is kept for sale, and the emptied combs are put right back into our hive to be filled again.

My autobiography, thus given, is that of the rearing and ordinary experiences of Honey Bee Queens, raised in comparatively small numbers in full colonies. My history, as I am controlled by my Masters in America, is such that I am made to wonderfully increase my powers of furnishing them Queens for sale to Bee Keepers all over the world. By this method I am literally "the mother of thousands of millions." For, instead of superintending the development of one Queen Cell at a time, or a small number of such managed colonies of an apiary, thousands of my eggs are transferred with little wooden spoons from our cells into artificial wax or wooden cells

made to imitate the bases of natural Queen Cells, fastened deftly upon a bar; Royal Jelly is spooned up and added, and then these bars of artificial cells are carried and placed in hives whose Queens have been purposely removed. Then our people, under the impetus of an instinct to refurnish themselves with a Queen, build out these cells, nurse each occupant, and finally shut the door against all intrusion until nature shall complete the work. When thus capped, my Masters either take them all away, distributing them among little boxes containing only a few hundreds of bees each, until we are hatched out, have been married and are laying, or else they protect each cell with a cunning guard of wire cloth, within which we are all hatched, and then distributed among baby-nuclei to be cared for until mated and laying. When thus laying, we are termed and sold as Untested Queens. When kept for twenty-one or more days, until our children show the requisite number of orthodox yellow bands on their backs, we

are known to be purely mated and are ready for market as Tested Italian Queens.

I am proud of my blood, my staying qualities and my price. But my American managers, by using the latest methods of these clever times, raise so many Queens of my steadfast Italian type, that they now sell worthy descendants of Queenie for one dollar each. And their households, numbering from thirty to sixty thousands each, are doing more in their searches for nectar to pollenize and render fruitful the orchards and the garden fruits, besides corn, shrubs, vegetables and grasses of different kinds, than many even intelligent people have any idea of. Remember this when you see them on an apple, plum, or clover blossom, and lay the laws of mercy and prudence down to that farmer or gardener, so thoughtless of his own wallet and palate, as to spray his trees or blooming small fruits while they are in blossom, and thus poison us by millions.

And remember, too, that while the gracious Creator has bestowed upon my

Workers a weapon for their defense, they will seldom sting unless you pinch, fight, or misuse them. Treat us well, and we will secure you more and better flowers, fruits, field and garden things, please your appetite with the sugary, delightsome honey, besides giving you an insight into one of the most interrogative diversions of wondrous nature.

Good-by. *Cheep, Cheepe, ee-e-e.*

THE END









