

air itself. Air sacs in her thorax filled in flight and made her buoyant; she could stop suddenly at 20 miles an hour, hover, fly backward, climb at a tremendous pace, or proceed seven miles in an unrelenting flight.

The world through which she wings her pathless way is almost impossibly beautiful, for the bee has five eyes to our two; compared to ours they are miracles of power and complexity.

In addition to three simple eyes, arranged on the vertex of the bee's head, there are, in the same relative position as our own, two compound eyes, each of which has 6,000 lenses where our eye has but one. Twelve thousand lenses compared to man's two.

No man can imagine the glorious splendour such eyes must see in shapes and colours of a spring or summer day; the angles of individual specks of dirt upon the ground, the pores of the young leaves on the hedges, the play of the sun on the rough bark of elms, and in every separate wimple in the sparkling stream.

The smell of the bee's fairyland is as adorable as its appearance. In her antennae are 5,000 tiny "nasal" smell hollows. Instead of our fumbling sense which tells us coarsely whether something held beneath our nose is pleasant or the reverse, she can detect the fragrance of a single apple blossom half a mile away.

Rapturous with the wonder of her flight, the bee shot down into a valley alongside a stream and into the golden tree.

The tree was what country people call "palm"—a variety of willow whose opening buds were heavy with a golden pollen known for centuries as bee-bread.

As yet only the first buds were open, but on these the yellow dust was so thick that fragrant airs scattered it like sifted flour, pervading the tree with a wonderful faint perfume, exciting even to human beings and to the bee the very breath of existence.

She hurled herself on to the biggest of the buds, scattering a thousand golden grains.

On her hind legs were little pollen baskets, cunningly protected by lids of hair and so placed that the maximum load could be placed there without spoiling the bee's delicate flying trim.

Seizing the blazing grains of pollen she stuffed them into the baskets so fast that her movements could hardly be followed by human eye. Greedily she leapt from bud to bud not waiting to strip one but plunging to and fro like a poor man who found himself in Ali Baba's cave, surrounded by heaps of precious jewels.

She was the first bee in that tree—the very first to discover this incalculable bounty of new bee bread.

Her baskets brimming over, with a whirl she sped upwards again into the sky and back to the oak wood, using that uncanny sense of direction that enables a bee to fly directly home though she may have zig-zagged over fifty meadows.

A last glorious leap lands her at the entrance to the bee colony's nest. Instantly two dark, fierce sentry bees dart from the hole and cross their antennae before the newcomer, as sentries might cross swords.

But this is no intruder, she has the community smell.

The pollen-bearer runs past swiftly into the heart of the tree. It would be dark to us, but the bee's splendid compound eyes can gather as much light there as we do in the sunshine. She goes along the rough way swiftly, then jumps suddenly up on to a hanging honeycomb and convulsively starts to unload the pollen from the baskets on her legs. Then, hardly waiting to rid herself of all her load, she begins to caper in a golden saraband.

Now she is the prima ballerina of the springtime, the harbinger of life renewed. Her violent dancing and the quivering beat of her wings waft the exciting pollen fragrance about the hive. Workers look up from their jobs then race toward the new pollen cell. Many of them try to touch the dancer with their quivering, eager antennae. In a minute the colony is in a commotion.

And then unfolds the strangest part of this hidden mystery. Some of the forager bees detach themselves from the dance, drop to the floor and race out of the entrance and away across the sky, straight toward the "palm" tree in the distant valley.

How do they know where she came from? Bees cannot communicate by sound anything except emotions. A hum of a certain pitch means danger, a low hum signals food, and so on; but they cannot indicate detail in this way, though many believe that they can "talk" by a sort of semaphore with their antennae.

Soon a steady stream of bees is pouring through the sunshine to the golden tree. As each bee returns loaded to the city, she darts into a cell near that in which the first pollen was stored and repeats faithfully the movements of the first joyous announcer.

After an hour the Grand Dance of the Bee Bread is in full career. Regiments of dancers swing and bow, turn and weave and pass, clapping their silver wings.

The oak hums as if all the machinery in fairyland were at work within. The sound is eloquent of an intensity of happiness and fulfilment. Anyone who has heard it can never forget it.

#### The Bridge of Colour.

All day the sentries had been more sullen than usual. Incoming bees were seized roughly and almost flung away through the gates into the oak. This ill temper communicated itself swiftly to the city streets. But there was something more here than mere irritation at the churlish temper of the sentries. There was fear—panic fear.

The humming in the waxen city rose louder. Workers came crowding in, many of them with half loads, some with none at all. Their movements were jerky, terrified, senseless. They beat their heads against cells. Some dipped wildly into open honey vats and began to fill themselves with loads ready to carry away in case some frightful doom fell upon the city and destroyed it. The fanners at the entrance redoubled their efforts to expel the extra heat exuded from the frightened bodies.

Outside the air was thickening, becoming hotter and more humid. It had a sour flavour. Suddenly out of the distance came great silver spears of rain, followed by a great puff of hot wind and then a growl of thunder. At the sound the bees' perturbation was shocked into stupefaction. Where they had been foaming over the cones like black water, they stopped and crouched.

All during the storm they remained so, seeming to wait permission to breathe again, till at length the thunder went rolling away into the distant skies and the rain spent itself in a few last, huge drops.

A patch of sunlight emerged like a gold cloak at the foot of the tree; then silently, a rainbow threw a seven-coloured scarf from end to end of heaven. As though drawn irresistibly the bees poured into the gateway and flooded like shimmering treacle on to the flat space of wood outside. The most fantastic thing was that they were silent. No bees hummed. No wings beat. They gathered there, crowding and staring at the stupendous bridge of colour.

Slowly the vision faded. Patches of vivid blue appeared in the sky between sly smudges of broken cloud, and the bees flowed back in through the city gates.

Inside the city the murmur of industry recommenced and grew. But more quietly this time; as the long shadows of evening gathered, it sank to the faintest humming.

Had the glory of the rainbow done something to the bee multitudes. Does their sense of colour, so infinitely more intense than ours, perhaps make the sight almost unbearable, as though things of dust had looked upon the act of immortal gods?

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