

A Pioneer of the Skies

Everyone dreams about flying. Soaring above the clouds, banking your wings to make graceful curves through the air, swooping like a hawk from great heights. Jumping off the toolshed roof. Spending a week with a bandage round your head. Being told how lucky you were not to break your neck.

Everyone dreams about flying. Emmaline did.

Emmaline Cayley was a pioneering scientist. She had declared this when she turned eleven. She was a leader in the field of aeronautics, as she would tell anyone who would listen; at least, she would be one day. The girls she knew said that Emmaline was mad and that she probably still believed in fairies. Emmaline didn't care what other girls thought. She didn't care about dolls or new dresses or tea parties; *she* cared about aeronautics. She was an aviatrix. By her thirteenth birthday, Emmaline had decided that she was going to invent a flying machine. That was more than a year ago in Calcutta, India, where she had been brought up.

Now she was in England, waiting to go to boarding school.

Emmaline sat on a fallen tree, looking out over a valley. It was smooth grassland with no rocks, no trees or tangly bushes and no patches of bog to get sucked into. Emmaline considered it a perfect place for an experiment with flight. What she actually thought was, "This would be a fine place to try out a flying machine — if I had one — and could get somebody (but not me) to sit in it and see what happened when it left the ground."



The truth is that Emmaline was afraid of flying. She didn't admit this to herself, however. She told herself that if she were to plummet to her doom, then all her experimental knowledge as a pioneer in aeronautics would die with her. Emmaline thought this would be a tragedy indeed.

A pilot. She needed a pilot.

Emmaline's great-great-uncle, Sir George Cayley, had tried inventing flying machines long ago. As a boy he'd made model gliders, studied birds' wings and conducted strange experiments with wind tunnels. But he hadn't built an actual, full-sized flying machine until 1849, when he was much older. He had ordered a boy to sit in the machine. Sir George was seventy-six at the time, so nobody felt he was letting anyone down by not flying it himself (when you are ancient, you can get away with a lot). The contraption worked as Sir George had hoped, sailing through the air a hundred yards or thereabouts, and nobody was injured.

A few years later, Cayley tried again with a bigger, better craft. This time, Sir George "volunteered" his coachman, a light, skinny man (just the type he needed), to fly the glider. A team of big, brawny farmhands from Cayley's estate hauled it up a hill above a valley known as Brompton Dale. The machine was a marvel. The lads pushed, and it rose in

the air, soared two hundred yards and landed in a meadow with a splintering, sickening crash. The coachman, John Appleby, tottered from the wreckage, limped back up the hill and resigned on the spot.

“Sir George, I wish to give notice. I was hired to drive, not to fly!”

Emmaline knew there was a simple moral to the story. Get somebody else to sit in the pilot’s seat.

But where to find him?

Emmaline’s daydreams were interrupted by a voice from behind her.

“Come in for tea, dear!” called Aunt Lucy. “There’s some excellent nettle jam. Not really pleasant to taste, but full of nutrition.”

Lucy Butterworth’s notion of food was, frankly, appalling. She read journals with strange, “scientific” articles about healthy eating. She gathered what might be vegetables (or weeds) from her overgrown garden, from hedgerows and pastures and woods, and from roadside ditches. She collected slugs and worms and woodlice, too. Then she cooked them. Emmaline hoped that there would be no slugs in the cakes her aunt had baked today.

Emmaline rose from her log and walked to the gate. Aunt Lucy’s smiling face peered over the wall. She was extremely short for a grown woman, though she made up for that with a waist measurement that was greater than her height. Unkind people in the village of Lower Owlthwaite, where Aunt Lucy lived, muttered to one another, asking how a woman who ate weeds and twigs could be so round. Those same unkind people would use words like “gangly” and “lanky” to describe Emmaline, when they knew her. (They didn’t, yet, because Emmaline had only been staying with her aunt for three weeks.)

The Mad Misadventures of Emmaline and Rubberbones

“Nice afternoon, dear?”

“Yes, Aunt Lucy,” replied Emmaline. “I am trying to work out how to fly across the valley.”

Most aunts would comment on this sort of statement. Possibly to say that it was ridiculous or impossible or life-threateningly dangerous. Lucy Butterworth wasn't one of those aunts.

“That's very nice, dear. Do you like rhubarb, centipede and dandelion crumble?” she asked.

They entered the house, a rambling old building that seemed to have grown in sections from a stone cottage. It was, indeed, a very higgledy-piggledy sort of house, with extra bits built on here and there over hundreds of years. People in the village called it “Mad Mrs. Butterworth's house” after Aunt Lucy. The mad lady with the odd food and the strange manners.

For some reason the house had two kitchens. Perhaps whoever had owned it in the first place had disliked the original and just built a new kitchen without removing the old one. Or perhaps there were relatives who disliked living



together so much that they couldn't bear to eat food from the same place. Aunt Lucy liked to say, "I never know where my next meal's coming from!" Emmaline laughed every time.

They went through the scullery, past the pantry, around one of the kitchens, up a flight of stairs, down another, round a corner and down a hall to the dining room.

Lal Singh had the table spread out like a banquet. He always did. No matter what the food itself might look like or taste like, Lal Singh was the perfect butler. He wore a long red tunic, a yellow turban and an air of polished perfection. Even his gleaming black beard seemed to be polished. Most houses didn't have butlers, especially crumbling old piles like Aunt Lucy's. Most butlers were dignified, quiet men in black clothes. Lal Singh was quiet and dignified, to be sure, but Emmaline understood that the tall Sikh was more than a servant. He wore the uniform of a regiment in the Queen's Indian Army. Uncle Cedric had been Lal Singh's commander, and now Lal Singh served his widow, Aunt Lucy.

"Lal Singh," began Emmaline as she nibbled at the edges of her watercress and earthworm sandwich, "do you know anything about flying?"

"No, miss, I do not."

"I bet he does," thought Emmaline. She believed that Lal Singh preferred not to reveal everything he knew.

She knew that Lal Singh did not eat Aunt Lucy's hideous food. She'd heard him tell her that his religion forbade him to eat the food made by an unbeliever. That was when Aunt Lucy had made him a special earwig curry as a surprise.

"I'm thinking of building a flying machine," said Emmaline. "Something that could carry a person through the sky. My great-great-uncle George built several, years ago. He made gliders, like kites really, with wings and room for a pilot. I want to make one that can go wherever I want. One day I'll make one with an engine of some kind."

"You mean like a railway locomotive, miss?" Lal Singh

spoke excellent English for a man who must have learned it as a grown-up. It was not the ordinary, dull language that Emmaline had learned. It was the English of India, with its different ways of pronouncing things, and a kind of lilt to how one said it. Lal Singh had a sort of twinkle in his voice, which Emmaline liked very much. It was good to hear again, so far from Calcutta and the life she had left behind.

“Well, perhaps,” replied Emmaline. “But something much smaller. If it was as heavy as a railway engine, it would never be able to stay in the air. You’d need wings the size of a football pitch, and balloons to lift it and —”

Emmaline wasn’t sure what you’d need. She’d read books and articles and Sir George’s volumes on the science of aeronautics. But they were hard to follow, full of tiny diagrams and odd words that she didn’t really understand. And, since he had died thirty-seven years ago, she couldn’t ask him.

So, Emmaline still didn’t have a pilot. And she didn’t have anything for him to pilot in.

