Praise for Peter Bunzl's



"Vivid and gripping...a beautifully-drawn world and delicate detailing, as finely wrought as a watch's workings." Kiran Millwood Hargrave, author of *The Girl of Ink and Stars*

> "A glittering clockwork treasure." Piers Torday, author of *The Last Wild*

"A delightfully badly behaved heroine, enthralling mechanicals and a stormer of a plot."

Abi Elphinstone, author of Sky Song

"WONDERFUL...a blend of Philip Pullman, Joan Aiken and Katherine Rundell. Don't miss!" Amanda Craig

"A classic adventure in every way I love – machines, Victoriana and high, pulse-pounding thrills. It's got real heart too." Rob Lloyd Jones, author of *Wild Boy*

"One of my favourite debuts of the year. Murder, mystery and mayhem in a thrilling Victorian adventure." Fiona Noble, *The Bookseller*

"It's pacy and exciting, and I loved the world that Peter has built." Robin Stevens, author of *A Murder Most Unladylike*

"A gem of a book." Katherine Woodfine, author of *The Clockwork Sparrow*





To Mum and Dad

First published in the UK in 2018 by Usborne Publishing Ltd., Usborne House, 83-85 Saffron Hill, London EC1N 8RT, England. www.usborne.com

Text © Peter Bunzl, 2018

Photo of Peter Bunzl © Thomas Butler

Cover and inside illustrations, including map by Becca Stadtlander © Usborne Publishing, 2018

Clockwork Key © Thinkstock / jgroup; Border © Shutterstock/ Lena Pan; Stripes © Tippawankongto; Grunge/halftone © Shutterstock / MPFphotography; Crumpled paper texture © Thinkstock / muangsatun; Circus lettering and decoration © Thinkstock / Shiffarigum; Clockface © Shutterstock / Vasilius; coffee ring stains © Thinkstock / Kumer; Wood Texture © Thinkstock / NatchaS; Plaque © Thinkstock / Andrey_Kuzmin; Newspaper © Thinkstock / kraphix; Old paper texture © Thinkstock / StudioM1

The right of Peter Bunzl to be identified as the author of this work has been asserted by him in accordance with the Copyright, Designs and Patents Act, 1988.

The name Usborne and the devices \mathcal{Q} are Trade Marks of Usborne Publishing Ltd.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

This is a work of fiction. The characters, incidents, and dialogues are products of the author's imagination and are not to be construed as real. Any resemblance to actual events or persons, living or dead, is entirely coincidental.

A CIP catalogue record for this book is available from the British Library.

ISBN 9781474940658 04698/1

JFMAMJJ SOND/18 Printed in the UK.



PETER BUNZL





Most people who fall in their dreams wake before they hit the ground.

She never did.

Instead, she dreamed of flying.

In that split second before she crashed to earth, she would throw her arms out wide, stretch her fingers like feathers, and swoop like a bird.

Drink the air.

Kiss the clouds.

Swallow the sky in one great glorious gulp.

Before an angry red sun burned her from the heavens...

And she tasted only ash in her mouth.



Afterwards she would wake alone and disorientated on her hard pallet bed in the attic of the Camden Workhouse and, with a pencil, mark the date next to all the others on the crumbling plaster. Then she would huddle beneath her rough blanket and think of all the things she missed before getting up.

Breakfast was leftovers from the meagre food that had been sent up to her the day before. She fed the stale scraps from her tin plate to the brave birds who came to perch on her window sill, pushing her hands through the bars to offer them crumbs.

When they'd finished she would watch them wing their way across the rooftops, wishing she could soar as high. But she could no more fly than she could set foot outside this room. She'd been imprisoned for so long she'd forgotten how the weather tasted.

The only person she ever clapped eyes on was the kitchen boy. Each afternoon he would saunter across the yard and haul on the creaking pulley to raise her basket of food; sometimes he would send a message too. When it came time to return the plate, she liked to add a present for him and a note in reply.

In spring she sent down empty eggshells from the nesting house sparrows; in summer, feathers from moulting pigeons; in autumn, conkers gouged from the green spiked shells that dropped on the roof slates. In winter it was bones picked white by scavenger crows.

She enjoyed his look of surprise when he received these gifts. His tiny eyes sparkling beneath his dark fringe of hair and the amused grin that lit up his tanned face. His was the sole smile she ever saw.

Until the day the visitor came.

A creak on the stair and a jangle of keys in the lock announced the arrival.

Then the workhouse proprietress, Miss Cleaver, opened the door and strode into the room, beckoning her to rise from her bed.

The visitor brushed a silver cloud of hair from her face and stepped out from behind Miss Cleaver, across the attic floor.

"Good morning, Angela. I've come a long way to see you."

Angela, yes, that was her name. It had been a long time since she'd heard it. She wanted to say hello, but when she opened her mouth to reply she could find the words neither on the tip of her tongue, nor hidden away deep inside her. She didn't mean to be rude, but sometimes when she was scared, speech would not come. It had been an age since she'd last talked to anyone and she barely knew where she kept her replies. The visitor came closer, smoothing out a fold in her sky-blue dress, and stopped at Angela's bedside. Soft rays of sunlight filtered through the barred window behind her head, lining her grey locks with angelic streaks of gold.

"Can you walk?" the visitor asked.

In answer, Angela threw her itchy blanket aside, reached for her stick and struggled to her feet.

The visitor proffered a hand. "Would you like to go on a little journey with me?"

Angela hesitated. She'd often longed to leave this attic, but now that freedom had been offered up so plainly she felt scared. Surely this stranger couldn't be worse than the workhouse, or Miss Cleaver? She didn't *feel* worse, but feelings sometimes lied.

Angela rubbed her eyes and stared unblinkingly at the visitor, who gave her the vaguest of smiles in return.

"Take my hand. I promise we are going somewhere special. Somewhere safe. Then, when we get there, I will help you find your wings. Would you like that?"

Angela nodded. Yes, she would. She would like it very much indeed. It was as if the visitor had seen straight into her dreams.

But how could this lady, who looked as if she'd never stretched or strained for anything in her life, teach her, a brittle orphan girl, how to fly? To find out, she would have to risk everything.

She glanced one last time around the dusty room, then reached out and grasped the visitor's hand, holding it tightly in her own.



Have you ever listened to your heart beat and wondered what makes you tick?

Lily Hartman had. Many times.

On the outside she resembled an unremarkable young lady, with flame-red hair, rosy cheeks and eyes the colour of the deep green ocean. But on the inside she was as different from other people as chalk was from cheese, or cog from bone.

This was because Lily had the Cogheart – a heart made entirely from clockwork. A machine of springs and mechanisms that nestled inside her chest. Ever since she first realized she possessed it a year ago, Lily had often wondered about the Cogheart's unique qualities. By every account it was indestructible – a perpetual motion machine. Lily was not entirely sure what that was, but there had been some suggestion, from Papa, that it meant she – or at least the heart – would carry on for ever. To live for ever was not an idea she was entirely enamoured of. The thought of outlasting everyone she'd ever known and loved was not a pleasant one. It made Lily feel less a natural human, more a freak of design...

At least, that was how she thought of herself when she dwelled on such things – though she tried not to, because often there was so much else to contemplate. Today, for example, was September the twenty-third, and her fourteenth birthday.

Lily was relieved to be banishing her unlucky thirteenth year to the past. It had been a time of sticky scrapes and perilous situations and she would never have survived it without the help of her friends. Its departure was definitely something to celebrate.

The trouble was no one was celebrating.

Not her best friend, Robert, nor Malkin, her pet mechanimal fox, nor Papa, nor the mechanical cook and housekeeper, Mrs Rust. Not even Captain Springer, Mr Wingnut or Miss Tock – the rest of Brackenbridge Manor's brigade of clockwork servants. Not a single one of them! That felt criminally unfair and downright outrageous! And the worst part of it was that Papa had postponed her birthday party until tomorrow, which was tantamount to cancelling it altogether.

Instead, later this evening, there was to be a grand gathering in the formal dining room, which was not to celebrate her fourteenth year – as one might expect – but rather to mark the fact that Papa was due to receive some sort of lifetime achievement award from the Mechanists' Guild for his work on mechanicals, or mechanimals... or some such.

To be honest Lily wasn't quite sure which, because she'd stopped listening at the point where he'd told her the presentation would preclude the celebration of her birthday. He had, of course, offered his most sincere apologies, but the date was fixed. Prearranged. Set in stone. And, as such, could not be changed.

So Lily had found herself moping around all day. The difficulty was finding a satisfactory place to do the moping, since the entire house was filled with the clanking preparations for Papa's "special" event.

At ten past five, Lily had finally settled on the stairwell. She had even changed early into her bright red evening dress – her favourite because it was the only one with pockets, and because it helped her stand out against the hall's sombre wallpaper. (That way the entire household might finally notice her bad humour, and what a martyr she was.)

Yet, still, no one paid her any attention.

Through the open doors of the dining room she observed Papa in his white silk shirt and smart black tailcoat, nervously touching his slicked back hair. He was instructing Mr Wingnut, one of their mechanicals, in some last-minute adjustments to the table setting.

Miss Tock, the mechanical maid, stood nearby, fastidiously polishing the cutlery that was laid out on the sideboard. Her arms moved quickly in repetitive clockwork motion and the chipped paint of her brow furrowed in concentration.

At the far end of the hall, the kitchen door stood ajar and Lily could hear Mrs Rust, the mechanical cook, juggling pots and pans and cursing the dishes she was preparing as if they were alive and could understand her.

"COGS AND CHRONOMETERS, BOIL, WILL YOU, YOU BLASTED TROUT!" she shouted. And then, "CLANKING CLOCKWORK, ARE YOU CABBAGES NEVER TO BE SAUERKRAUTED?" This was only marginally worse than her usual turn of phrase.

As for Robert, who'd lived with them nearly a year since his da's untimely passing, Lily hadn't seen or heard

a peep from him all day. She imagined he was in his room getting changed into his smart suit for dinner. Malkin, that furry red-faced rascal, was more than likely with him. Either that or he was up to no good, digging holes in the lawn again.

Lily had just decided she might take herself off somewhere to be even more alone, so she could have a good sulk about things in peace, when she heard a strange little knock at the front door.

A slow and rhythmic *rat-a-tat-tat*.

The knocking was quite insistent.

Lily looked about to see if there was anyone else who might answer it, but there was not, so finally she stood and walked through the vestibule.

As she reached for the door handle the knocking stopped, and when she pulled open the door there was no one there at all. Only a small red-and-white striped hatbox tied with a twirl of multicoloured ribbon, which sat on the doorstep.

Tucked beneath the box's ribbon was a creamcoloured envelope addressed to:

Aliss Hartman, of Brackenbridge Alanor.

Lily bent down and picked the hatbox up. A present!

How exciting! She hadn't been expecting anything from outside the house. She looked around eagerly for the mysterious phantom who must've delivered it, but whoever they were, they seemed to have entirely vanished.

So instead, she pulled the envelope from beneath the ribbon and took out the card. It featured an etching of a striped hot-air balloon hovering over a red-and-white striped circus tent. On the back of the card in the same scrawling handwriting as on the envelope, a poem was written:

Dear Lily, We have a simple question, and it's one that's not a trick: Some of us are wondering what it is that makes you tick? Two clues may solve our riddle, if we may be so bold – One is something spanking new and the other something old! We hope that you enjoy both gifts and dearly want to say: We wish you many happy returns, on this your fourteenth birthday! Lily considered who this rhyme could be from and what it could possibly mean. One line gave her particular pause for thought:

What it is that makes you tick.

The phrase made her ill at ease. It felt a little too close to the bone. As if whoever'd sent the card was aware of her mechanical heart...and yet nobody knew of that save for Papa, Malkin, Robert and the housemechanicals... Oh, and Anna and Tolly. But surely none of them had sent this, had they?

And anyway, why such a cryptic riddle, with all its hints and winks? Because what else could "tick" mean in this context but the sound her heart made? The question was not only about who she was, it was about *what* she was... Unless she was reading too much into it? Could it be an accidental turn of phrase? Perhaps she'd become too paranoid about the Cogheart, too worried about its discovery...

The mystery was made more absurd by the fact that this was the first and only gift Lily had received today.

She undid the ribbon, lifted the lid of the hatbox and peered inside.

A sliver of vermilion flashed in the sunlight.

Lily took the lid off completely.

Inside was not a hat, or any item one might reasonably

wear on one's head. Instead, nestled in a cloud of green tissue paper, was a thin book bound in soft, port-coloured leather. The cover was stamped with a curling gold ammonite.

Lily took the book out of the box. It was barely bigger than her hand. The pages were buckled out of shape, overflowing with stuck-in scraps that protruded from the edges. A notebook, then?

She opened the cover and flicked past the fly-leaves. In the centre of the first page, printed in ink, were three initials:

$\mathcal{G}_{\mathcal{R}} \mathcal{R}_{\mathcal{R}} \mathcal{F}_{\mathcal{R}}$

Lily knew at once who the notebook had belonged to: her mama, Grace Rose Fairfax. Fairfax had been Mama's maiden name, before she'd married Professor John Hartman, before she'd had Lily, and before she'd died on that tragic snowy night nearly eight years ago.

This was her notebook. A notebook Lily had never known existed.

Lily was so wrapped up in that thought that she completely forgot her qualms about the accompanying message on the birthday card. She felt as if she was holding a slice of the past in her hand.

Her fingers shook as she turned the pages, her eyes skimming odd images and phrases. The notebook seemed to be an attempt to document the various characteristics of flight. It was filled with diary entries, drawings, collages, diagrams and sketches of birds. Scattered charts of weight-to-wing ratios were mixed with graphs and maps plotting the wind currents in the skies over England and tinted images ripped from magazines and newspapers, depicting angels, sphinxes and harpies. On one page there was even an illustration ripped out of a children's book of Icarus and Daedalus with their wax-and-feather wings, flying too close to the sun.

She would need some time to take it all in. And she needed to find out who'd sent it. Surely no one in the house would trouble to deposit a present on the doorstep, would they? But where else could Mama's notebook have come from? It couldn't have been left by someone local, because no one in the area had known Mama – she had died before they'd moved here. What's more, Papa made sure they kept themselves to themselves, so it seemed unlikely there were any neighbours or villagers who would even have known it was Lily's birthday. Two gifts, the card had said, and yet this was only one. Perhaps there was another clue in the box? She searched among the green tissue paper, but there was nothing else.

Still pondering these conundrums, Lily descended

the porch steps and stared out along the length of the driveway, hoping for some sign of where the mysterious delivery may have come from. But all she saw was Captain Springer, the mechanical odd-jobs man and driver, raking the front lawn. The cogs and springs of his arms and legs were jittering and chugging as he gathered leaves into one big, neat pile. The peeling paint on his metal chassis was almost the same rusty red colour as the autumnal trees.

Lily put her fingers in her mouth and whistled her loudest wolf whistle to get his attention.

Captain Springer stopped his raking and turned his head, the rims of his large goggly eyes whirring around as his pupils focused on her.

"Did anyone just call at the house?" Lily shouted.

Captain Springer shook his head. It rattled loosely on the gimbal joint in his neck. "Bless my bolts, no. Not for the whole afternoon. Why? Has something happened?"

Lily wondered if she should tell him about the present, but then decided against it.

"Nothing in particular," she said.

Captain Springer tutted and returned to his task.

Lily picked up the hatbox and went back inside, shutting the door behind her. She stood in the front hall for a good few seconds, stroking her fingers across the box's lid and pondering the notebook and card.

She should probably find somewhere to look at them properly before dinner. The grandfather clock beside the door to the front parlour read five thirty-five. She had until six, when people would start to arrive for the party.

If she really wanted to get some reading done, it would have to be somewhere private, where no one would look for her – and she knew the exact spot!

With the hatbox under one arm, Lily ascended the grand staircase and made her way along the landing. She passed the library, and then Papa's office, where the portrait of Mama stared down at her from over the fireplace.

She crossed in front of the closed door to Robert's room and heard him arguing with Malkin inside.

"I'm trying to perform a delicate operation here," Robert was saying.

"Then let me help," Malkin replied.

"No, you'll only get fox-fur in the workings. Or chew something valuable."

"I will not."

"You're gnawing at my trouser leg right now!"

"Well, I do need to keep my teeth sharp. And I think you should know you positively reek of mothballs."

Lily didn't hear Robert's reply, for she continued on

her way, past the back bathroom and the linen closet. At the end of the passage she reached for a glass doorknob set at hand-height into the wallpaper. Turning it, she stepped into a secret servants' stairwell that ran up the back of the house.

Lily climbed the steep staircase, avoiding the mechanicals' quarters on the highest landing, before finally reaching a set of wooden steps that led under the eaves of the roof into a tower room at the very top of the house. There, dusty wooden floorboards stretched out beneath four big arched windows that faced out to the north, south, east and west.

Set before the eastern window was a telescope attached to a tripod, which Lily, Robert and Papa sometimes used for stargazing. At the opposite end of the room, a sun-faded rug spread across the floor beneath the western window. On it sat an old armchair with upholstery that looked like it had survived a vicious squirrel attack, but had actually only been mauled by Malkin. Next to the chair was a steamer trunk that Lily and Robert used as a coffee table. Its top was crowded with stacks of books, half-drunk cups of tea and an old oil lamp.

When Lily and Robert had first made this room their den, Lily had busily decorated the walls with copperplate

etchings from her most gruesome penny dreadfuls, pinning them onto the bare bricks around the chair. There were four illustrations from *Varney the Vampyre Versus the Air-Pirates* and six from *Spring-Heeled Jack Battles the Spider-Monsters* – a particular favourite series of Lily's since she'd learned her friend Anna Quinn had penned a few issues.

Each grisly page had been liberally doused in bloodred paint to make them even gorier. Lily had used a whole tube of red from her Young Lady's Watercolour Set to paint them and most of the pins in her Goodly Seamstresses' Sewing Kit to fix them to the wall – those past birthday gifts from Papa had come in useful after all.

The illustrations flapped in the wind as Lily opened the nearest window to let in a little air.

She dropped the hatbox beside the armchair and sat down. Cradling the red notebook in her lap, she opened it to the first full page of writing.

On the top line her mama had scribbled the day and date, and an opening entry:

<u>Sunday, 1st September 1867,</u> <u>the Fairfax residence</u>

A new Flyology This notebook is inspired by the writings of Ada Lovelace mechanist extraordinaire. Specifically, her innovative study Flyology, in which she first proposed the creation of clockwork-powered, winged creatures – ornithopters that mimicked the flight of birds.

Within these pages, I intend to expand on her theories; shepherding my own ideas into fruition so that they might soar to the great heights enjoyed by Ada before the end of this most marvellous century.

Not only will I record my day-to-day progress in this endeavour, but I will also document the trials I face as one of the first women studying in the mechanical field – an arena dominated by men.

My name is Grace Rose Fairfax, and this is my story...

As Lily read, a lump formed in her throat. At points her eyes blurred, and she lost focus. It was almost too much to bear to think she could meet Mama again through the pages of this red notebook. Each sentence felt like an invitation she hadn't expected to receive, to a conversation she'd never known she could have.

How long was Mama working on the Flyology project? Had she ever managed to make it a reality? Papa had certainly never mentioned it, nor this notebook. So who had sent it? Perhaps the second clue the riddle mentioned would offer an answer when it finally arrived. Come to think of it, Papa hadn't said much about the fact that Mama had been a mechanist either. He had alluded to it in passing, but he'd never gone into detail. Lily longed to ask him about his and Mama's life together, but she was afraid talk of the past might upset him, and she never seemed to hit on the right moment.

Now here, between the pages of this red notebook, she might find the answers she'd been searching for to the questions that burned so strongly in her heart. A heart that broke on that cold October day seven years ago when Mama died.

Lily's hand strayed to her chest and felt for the soft outline of her scars – cuts she once thought had been made by shattering glass during the accident that had gravely injured her and killed Mama, but were in actual fact from the transplant operation when the Cogheart had been knitted into her body.

Those raw wounds had healed over long ago, but the ghostly pain and loss they'd ushered in still ached within her, and Lily didn't feel like reliving those emotions right now. Not on her birthday.

She took her hand from her chest and closed the notebook. As she did so, a single sheet of scalloped card fell from the endpapers, fluttering to the floor like a feather and coming to rest at her feet. She bent down to pick it up, turning it over to examine it.

Etched on its front in silver and gold was an image of a girl in a frilly tutu and ballet shoes. From the picture it was hard to tell the girl's age, but she looked to be around fifteen years old. Her long, languid arms were spread wide above her head and stretched out behind them was the most enormous set of mechanical wings.

The wings flowed from the girl's back as if they were part of her body. Their every feather, cog and wire was picked out in ink and around them a set of curlicued words was arranged:



Underneath the poster was a note for Lily:

This VIP ticket entitles Lily Hartman and three friends to visit us and receive answers.

PS Angelique would like to meet you after the show!

Could this be the second clue? Strange, Lily knew no one named Angelique, nor any circus performers, and she was entirely unfamiliar with Slimwood's Stupendous Skycircus – whatever that was... But to discover a hybrid girl with wings wanted to meet her – right after learning about Mama's Flyology project, and to find the promise of answers in the same invitation – that was just too intriguing.

Hybrids weren't common and Lily had never encountered one her own age before. In fact, the truth was, she'd only ever met two: horrible eye-less men named Roach and Mould, who'd tried to kill her. Otherwise, she'd no idea how many more existed in the world. The rest, she imagined, were in all likelihood hidden away; kept closeted from sight, as she was, so as not to disturb the "normal" populace.

That being probable, it was nice to see a girl, who at least in this picture, was displaying her difference and seemed proud of it. Lily hoped her wings were real and not just fancy-dress or fantasy. How had she ended up in the circus in the first place? And was there a connection between her and Mama?

She peered closer at the girl's picture, but her face held no answers, it was merely a mystery dissolving into print marks. There was only one way to discover the truth – she would have to go to the Skycircus tonight. It would be her only chance to speak with Angelique.

From its rather unpromising start, this birthday was turning out to be far more interesting than she'd expected. She scanned the ticket again.

The address was a mystery, but the sun had barely started to set – if the circus was in Brackenbridge, she would probably still be able to see it from her tower window.

She stood and pressed her eye to the end of the telescope; her heart ticked loudly as she swung the lens around, scanning the countryside.

In the sky, the grey scudding clouds were rimmed with gold, like sweat-stains on the silk lining of an old hat. A thin yellow fog rose from the waters of the River Bracken and wound its way through the village, where the crowns of the trees, blazing a bright autumnal red, interrupted the jagged lines of the rooftops.

In the meadow at the far end of the village, half-

hidden by the scrub and woodland, a strand of gold flashed in the quickening twilight.

Lily focused in on it.

It was a winged figurehead on the front of a tethered sky-ship.

A hot-air balloon bobbed above it. The red-and-white striped silks pulsed softly like a glow-worm in the gloaming, spilling out strands of light over the top of an enormous canvas tent and a high, spiked circular wooden fence plastered with colourful posters. Crowds of people were already wading through the knee-high fog to queue up outside the kiosk and gated entranceway of what had to be the Skycircus.



R obert was running out of time. The hour of the professor's party had almost arrived. The guests were due to start turning up any moment and he needed to get changed for the evening's events. The trouble was he still hadn't finished repairing Lily's birthday present.

He'd always intended to have the pocket watch mended by her fourteenth birthday at the very latest, and to give it to her as a surprise. But here he was, still working on it at the eleventh hour. And here the watch was, still not working.

At least Malkin had stopped gnawing at his trouser leg - that was one less distraction. Though the threadbare