

The Mathematical Bridge

JIM KELLY

Allison & Busby Limited 11 Wardour Mews London W1F 8AN allisonandbusby.com

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CHAPTER ONE

New Year, 1940 Cambridge

Detective Inspector Eden Brooke trudged into Market Hill, the city's great square, as snowflakes fell, thick and slow, each one a mathematical gem, seesawing down through the dead of night. Every sound was muffled, a clock striking the hour out of time, the rhythmic bark of a riverside dog, the distant rumble of a munitions train to the east, heading for the coastal ports. The blackout was complete, but the snow held its own light, an interior luminescence, revealing the low clouds above. Brooke stopped in his tracks, his last crisp footstep echoless, and wondered if he could hear the snow falling; an icy whisper, in time with the sparkling of the crystals as they settled on the cobbles, composing themselves into a seamless white sheet.

In the sky to the south a pair of searchlights fidgeted, searching for the German bombers yet to come. Brooke thought of his son, Luke, with the British Expeditionary Force, camped out along the Belgian border, asleep now under the same weeping sky, waiting for spring, the thaw, and the first volley of shells from the east. The war was nearly five months old, and the clash of the Great Powers edged nearer every day, the so-called phoney war stretching out towards the inevitable breaking point.

Brooke walked on through a world he knew well: the city at night, a maze of stone and hidden places, a personal kingdom. He passed the bone-white marble columns of the Senate House and saw King's Parade ahead, a great open thoroughfare, bordered on one side by a chaotic jumble of shops and inns, looking out across a wide snowfield to the stone traceries of the college buildings, and the soaring silhouette of King's College Chapel. The scene was utterly quiet, frozen in the moment. He looked up, snowflakes falling wetly in his eyes, and saw the four great pinnacles of the chapel disappearing into the clouds, as if the building had been let down from the heavens on four stone hooks.

Brooke lit a cigarette, one of his precious Black Russians, and took in the arctic air laced with that strangely metallic edge, redolent of granite islands, and icebergs, and vast grey oceans. The snow, which had fallen now for three consecutive days since New Year's Eve, covered everything in a single folded counterpane, partly obscuring a parked car, all the pavements, a few shop doorways, even the makeshift sandbag walls which had been set up to restrict bomb blast, should the long-awaited air raids finally materialise. Ice clung to the wooden boards which had replaced the stained-glass windows of the great chapel, whisked away to the safety of a city cellar.

Even in this soft light Brooke needed his tinted glasses to protect his damaged eyes: the ochre lenses tonight, providing a subtle filter which produced, for him alone, a gilded world. In his pocket, ready for use, were the green-tinted, the blue and the black. But the city at night had always been shadowy, even before the blackout, gas shortages enforcing 'lights-out' at ten o'clock for most of the years after the Great War. And, in truth, he didn't need his eyes to find his way; he read these streets as if they were set out in Braille.

The silence was broken by the bell of Great St Mary's marking the hour.

Brooke stopped at his usual spot, opposite the gatehouse of King's College. He could just see a splash of yellow light on the stonework where the door of the porters' lodge had swung open. A dark figure appeared with a shielded lantern and trudged off into the Front Court beyond to begin the ritual round of checking doors and windows, and looking out for chinks of telltale light from the rooms of scholars burning midnight oil. A cat, in pursuit, jumped from footprint to footprint, until they were both gone.

Brooke savoured the cigarette, admiring, as he always did, the way the gold filter paper caught the light. Drawing in the nicotine, he took a step forward, turned on his heel and examined the wall above his head, knowing what he'd find: a stone oval plaque which had hung there since he'd first spotted it as a lonely child wandering the city. The frost had clung to the letters, and the roughly hewn decorative symbols of a wine pitcher and a bunch of grapes.

Edward FitzGerald, poet, lived here: 1880–1891

He'd read FitzGerald's masterpiece when he'd been a soldier in the desert during the Great War. The *Rubáiyát of Omar Khayyám*, a translation of the Persian original, had replaced *The* *Iliad* in his kitbag. Each night, on the long march from Cairo across the northern Sinai with the Egyptian Expeditionary Force, he'd kept up his spirits with the poet's gentle invitation to enjoy the day.

Be happy for this moment. This moment is your life.

Brooke bent down, made a snowball and launched it at the plaque. Given the horrors of that war, which he'd been lucky to survive, it was a philosophy that celebrated the life he lived.

The white silence stretched on. Perhaps it was the echo of the *Rubáiyát*, but the softly blanketed street reminded him of the desert, the blinding sands between Gaza and the sea which crept over villages and roads, encampments and trees, leaving them just like this: softened and wrapped, parcelled in curves.

It was the desert that had left Brooke a nighthawk, haunted by insomnia, the result of his capture and torture by the Ottoman Turks. Despite the pain – the light of interrogation in his eyes at night, the blinding sun in the day – he'd kept the secrets he had to keep. The king had given him a medal, but he'd never seen himself as a hero. By the fifth day he'd been unable to tell truth from lies. It all seemed like a long time ago.

He filled his lungs, held his breath, and felt certain something was about to begin. The unexpected bonus of his condition was this insomniac buzz: a hyperacuity, his senses operating at a preternatural level.

A moment before the sound itself, he heard its forward echo: the pip of a police whistle. Then three blasts, a pause, three more – the agreed signal.

Brooke ran to the corner of Kings Lane, the metal Blakeys on his shoes penetrating the snow to clash with the pavement beneath. He stopped, breathing hard, and heard the whistle again, but louder, and now the *dot-dot-dot* rhythm had gone. Narrow, cobbled under the snow, the dark passage led to the doors of Queens' College below its three octagonal turrets.

PC Collins stood in the street, his black cape swinging as he turned left and right blowing his whistle.

Brooke slowed to a walking pace. The Borough police force was one of the smallest in the country. With only eighteen constables in uniform, he knew them all: Collins, just eighteen, was excitable and what Claire would have called 'skittery'. Brooke detected a note of panic now in the manic whistling. What had unsettled the young constable? A fleeing figure – a student climbing back into his rooms after a secret assignation?

'Collins,' he said. 'Calm down, lad. What's happened here?' Collins dropped his whistle on its cord.

Brooke slipped off his hat, folding it back into shape, replacing it with a downward tug of the forward edge. The great facade of the college looked supremely unruffled. His father had once brought him here to point out Erasmus's rooms in the third high turret. A symbol of calm, reasonable logic.

Collins stood awkwardly at attention, breathing heavily.

'Sorry, sir,' he said, tongue-tied.

Brooke's reputation went before him: brisk, unpredictable, unable to suffer fools. Getting in the detective inspector's bad books was considered a fatal career move on the Borough. Collins, like the rest of the young constables, would be in the army by the spring if the war didn't end. Like the rest he'd no doubt hoped for a quiet life until then.

'What's happened, Collins?'

'Sir. I was knocking off, on my way home, when I saw the

porter out in the street shouting. There's a body in the river, sir, floating downstream. He's ringing the Spinning House now, sir. I've asked for assistance.'

The Spinning House was the Borough's headquarters, a medieval gaol less than half a mile away.

'There's two others out on night beat: that's Jenkins and Talbot. I thought they'd hear the whistle.'

'Good,' said Brooke. 'This body. Did he actually see it? Any signs of life?'

A blank stare told Brooke all he needed to know: Collins hadn't asked.

'When reinforcements arrive, send them down the river, to the Great Bridge, then Jesus Lock. If the body's floating, that's where it will go. The stream's in flood. I'll deal with the porter. Keep up the whistling. Just three blasts then silence. Got it?'

Collins nodded.

'When the others are downriver you go up, check out the bridges. Start with Silver Street. See if anyone's about.'

Collins looked like he was trying to memorise his orders.

Brooke stepped over the high sill through the miniature door set in the great wooden gates of the college and found the porter in his lodge.

'I got through. They're sending help,' he said, standing, dropping the phone, his face utterly devoid of colour.

'You alright?' asked Brooke.

'Follow me,' he said, grabbing a storm lantern and a torch.

Front Court was a well of shadow, but Cloister Court emerged from the night because of its Tudor range of black timber on white plaster. Ahead, Brooke could just see the porter's boots illuminated by the lantern, his footprints inky black. Under an archway with a single retching gargoyle's head, they emerged over the river on the graceful arc of the Mathematical Bridge, built of straight wooden beams set at a tangent to create a curved span, and – according to disputed legend – built without a nail.

The porter, breathless, stood at the centre, holding the lantern out over the water. The Cam was wild, a chocolate-coloured spate swirling beneath their feet, the surface pockmarked with miniature spiral whirlpools. Occasional shards of ice swept by.

'Right here,' he said. 'There was a sack, like for potatoes? It was gone in a second. I think he was struggling to get out. I heard a voice, sir. Clear as my own.'

'What did it say, this voice?'

'Help me. *Help me*. Just that. And the terrible thing is it was the voice of a child. A boy – I'd swear to it. Who could do that, sir – drown a child like a dog?'

CHAPTER TWO

Brooke ran back, crossing King's Parade, where he heard more police whistles and saw a radio car in the distance, its feeble, swaddled headlamps myopic in the still-falling snow, disappearing towards the Great Bridge. Opposite Trinity's gatehouse he turned sharply into the old Jewish ghetto, a maze-like neighbourhood of blind alleys, which he'd memorised as a child. Left, right, right brought him into a small yard where the snow had etched the outline of a series of noble heads in stone, supporting iron gutters.

The yard widened to reveal a college facade and a single great door. He executed the long-perfected late-night knock – two taps, a pause, one tap – using his signet ring against the iron hinge. Waiting, imagining the night porter's stately steps, he looked up into the blizzard, each flake in shadow against the luminous sky above. He thought of the snow settling on the swirling river, the child struggling, the double suffocation of the sacking and the water, but most of all the bitter cold.

Doric, the night porter of Michaelhouse, stood in the open door, the great ring of college keys in his hand, turning away already to the interior of the lodge with its panelled walls and the orange glow of a coke fire. Here, on most nights, Brooke took refuge for warmth and the promise of a few leftovers from the kitchens or took a seat by the fire and read the college's newspapers. Doric was one of Brooke's faithful fellow nighthawks, condemned to live life out of the light, at home in the shadowy world of the college after dark, of which he was the undisputed master.

Doric picked up a kettle and set it on the stove.

'Not tonight, Doric,' said Brooke, still on the doorstep. Hat off, he ran a hand back through thick black hair which flopped forward over his forehead. 'There's no time. I need the keys to the college punt. A child's in the water. We may have time, if we're quick.'

Doric grabbed a single iron key from a hook.

'What about Jesus Lock?' he said, turning to a map on the wall which showed the tortured passage of the Cam through the city. 'The river's in flood; it may be open.'

If the lock was open the child might be swept out into the wider river and on towards the sea.

'Ring the lock-keeper, Doric,' said Brooke, resetting his hat. 'If you can find a number. If not, ring the Spinning House, they'll have it. There's a cottage by the gates. Get them to close the sluice too. I'll be there soon.'

'Take this,' added Doric, producing one of the college torches

from beneath the counter and handing it over with the key.

Brooke ran back to the river, retracing his steps, almost lost in the falling snow. His blood raced, his heartbeat strained, and it made him consider again the child: *its* heart might be slowing, the blood too, collecting in the ice-cold limbs. Each minute that passed, he knew, took them further away from life. The river could not be more than a degree or two above freezing. The shock alone could be fatal.

Michaelhouse did not back onto the river like most of the other medieval colleges. However, there were plenty of keen college punters and rowers who liked to take to the water, and so a wharf was needed, beyond a locked door, where in the summer Brooke indulged his private passion for swimming in the river. Each night he'd slip into the green water, and slide unseen through the heart of the old city.

Tonight, the Michaelhouse punts lay in a frozen flotilla, chained and covered in a single blanket of snow.

Brooke tackled the icy padlock and set a punt free. As a student he'd been adept with the pole, guiding the flat-bottomed boat out past sun-splashed meadows into the countryside, where the shallow river ran in a shingle bed. Nevertheless, the frost made him clumsy, and he struggled to use the pole as a rudder, swinging out into the mainstream.

Doric's torch picked out the stone canyon which here served as the river's banks, the walls of colleges pressing in on both sides of this stretch of what everyone called the Backs. The beam of light caught flecks of falling snow; student rooms, shuttered and dark; a single owl in an empty carved niche, eyes wide. The current at the centre of the channel was rapid, but in the backwaters created by water gates and docks, steps and bridges, eddies swirled in confused circles. If the child was still afloat, the sack could have snagged anywhere, but there was no sign of life.

Blocks of ice bobbed in the muddy water. The cold river, caught between the damp college walls, had chilled the air. Brooke's breath billowed out as he used the pole to steer under the string of stone bridges which served the colleges, until a sharp turn brought him to the Great Bridge itself, the old Roman crossing which had joined the lower town to the upper, clustered around the castle. From here it was a straight run to Jesus Lock.

On the bridge above, a constable stood, swinging a lantern.

'No sign of the child,' a voice called. 'They're shutting the lock, and Baits Bite too.' Then Brooke was gone, swirling past under the echoing stone arch.

In summer the journey would have required him to use his weight on the pole, like a lever grounded in the gravel bed, to propel himself forward, but tonight the Cam was a torrent and so the river took him on at speed, and ahead he saw quite distinctly the white water of the approaching weir, to one side of the sluices and the lock.

His torchlight swept the flood, left to right, left to right. The river was black but threaded with whirling circles of silver bubbles. On the distant lock bridge, the keeper worked at an iron wheel, inching the sluice gates shut. A police constable, on the far bank, trained a torch on the water as it gushed through the narrowing gap, watching for the child.

The snowfall faltered; the moon appeared through a break in unseen clouds, shining over the wide, bubbling stream. The punt raced onwards, so that Brooke had to cling to the sides. His eyes scanned the water and, for a second, he almost missed it, something not moving with the flood: a glimpse of hessian; a hand, seeming to reach up, breaking the surface twenty yards ahead. In three tumbling seconds he was almost upon it, reaching out, knowing even in the moment that he was a yard short. In an effort to lock fingers to fingers he nearly tumbled out of the boat. Then he looked back, levelling the torch beam, but the hand was gone.

The punt dipped, swung and plummeted though the narrowing gates of the sluice. To the right he glimpsed the lock-keeper's face, shiny with sweat, a hand raised, the eyes wide. Below the lock the cascading flood created a whirlpool, which spun the punt, with Brooke at its centre. Only now, slipping away from the lock, did he notice the thunder of the water as it diminished, leaving a strange, trickling calm. The lock was shut behind him. Had the child slipped through, or was he trapped in the river above?

'Any sign?' shouted the lock-keeper, a silhouette against the searchlight.

Brooke strained to catch the echo of a child's voice, but all he heard was the strange *Brrrr! Brrrr!* of a distant nighthawk in the reeds. He swung the torch across the water's surface.

'Nothing,' he said, in a whisper to himself.