



CHAPTER I

London – Tuesday 18th January 1803

“Gentlemen, ladies,” called Dr Keate, above the low throb of voices. “Signore Aldini is ready to begin his experiments.”

Dozens of faces turned towards the pair of stout wooden tables that had been set up in the centre of the room. Arranged on one of them were three devices, thin columns of metal discs held in rigid frames. Around both tables were tall candle stands capped with reflectors, to throw a yellowish, shimmering light down upon the proceedings.

The room itself was very large, but its extremities and its ornately decorated ceiling were lost in the gloom beyond the candlelight. Outside the building, bitter cold gripped Lincoln’s Inn Fields and the rest of the city, but the room was warmed by the press of bodies: doctors and surgeons from various London hospitals, some of their wives and mistresses, friends and hangers-on, a scattering of curiosity seekers and journalists. Their second and third rows stood on long refectory benches to get a better view. The room was thick with their breath and a musty, acrid odour hung in the air, a churning mixture of human beings and dead tissue.

Dr Keate, president of the Royal College of Surgeons, beckoned the visitor forward. Giovanni Aldini stepped into the glow of light, smiling in response to a polite patter of applause.

Aldini had sharp, hawkish features, with a shock of dark hair and a tall, stiffly starched collar. His bright, hooded eyes confidently scanned his audience—the men exhibiting the gradations of their status in the quality of their cloth coats, their knotted linen cravats, their round-hats and tie-wigs, the women in high-waisted dresses, their hair spilling fashionably from beneath feathered bonnets.

Aldini's confidence was a result of his having given demonstrations such as this many times before, always with the same result. He nodded acknowledgement and the applause died down.

Dr Keate snapped his fingers at a couple of ragged assistants as he spoke, pointing them to fetch items from an adjoining room. "Signore Aldini is professor of experimental philosophy at the university in Bologna and a member of the medical and galvanic societies of Paris. We are tonight promised a series of interesting experiments, illustrative of the power of electrical galvanism."

Keate nodded to a familiar face in the crowd, a thin man with his arms around two plump women he'd tonight been introducing to people as his wards. "I see Dr Ettis from St Saviour's is among our number this evening, I know he attended Signore Aldini's demonstration there last week and has spoken of it with enthusiasm."

Dr Ettis grinned warmly and hugged at his companions. Neither of them appeared comfortable with either their brand new clothes or their august surroundings.

"Signore Aldini will be aided by our college beadle, Mr Pass," said Dr Keate, who then withdrew into the audience.

Aldini's voice was high, almost musical, his accent showing only in its Italian intonations. "My friends, I have travelled throughout Europe showing distinguished persons like

yourselves the remarkable results achievable through the techniques I have developed.”

As Aldini spoke, the short, small-eyed beadle Mr Pass, accompanied by one of the ragged assistants, carried a long, heavy bundle up to the empty table. It was wrapped in grimy sacking, spotted here and there with dark stains. Once it was heaved into place, Mr Pass dabbed nervously at his face with a cloth.

“The application of electrical currents,” said Aldini, “has already proven to have marked therapeutic effects in the medical treatment of ailments of many kinds. I myself have achieved complete and lasting cures in patients suffering disturbances of the mind of the most acute and distressing nature. The sponsors of my journey to England, the Humane Society, are interested in the application of galvanism for revivification in cases of drowning. I will show you tonight that this, and far more, is indeed possible.”

At his cue, Pass hopped forward and removed the sacking. Left on the table, lying naked on its back in the yellow candlelight, was the dead body of a man in his twenties.

“I began my experiments using the legs of dead frogs, replicating and advancing the work of my own uncle, the respected professor of anatomy Luigi Galvani, from whom the process of galvanism derives its name. I then moved on to the bodies of oxen, showing that the same techniques can be applied to larger animals and now, as you will see, to the human body itself.”

The audience’s attention was fixed and silent. Ettis’s plump wards stared, their cheeks pink. Mr Pass fetched a large wooden tray, on which were a selection of sharp surgical knives and long, thin metal rods.

“Here,” declared Aldini, indicating the table in a smoothly flowing gesture, “is the corpse of a man executed by hanging at Newgate Prison only a matter of hours ago, a man named George Forster. Yesterday, he was tried and found guilty of the murders of his wife and child, and of the disposing of their bodies in the

Paddington Canal. As you can see, no life remains. The body, although fresh, is quite dead.”

Aldini took a knife from the tray. With a theatrical flourish, he jabbed the point into the corpse’s skin at several points along its side, then spread his hands towards the audience. See? Dead.

George Forster’s motionless eyes faced up into the light, sightless and unblinking. The onlookers were gripped with anticipation. Mr Pass felt his heart pulse in his ears.

“My first experiment begins with an incision into the nape of the neck, close below the occiput.”

Grasping the corpse’s hair, Aldini pulled the head to one side and cut into the area at the base of the skull, making a rectangular hole that quickly exposed the top of the spinal column. His hands were thick with residual blood as Pass handed him an instrument resembling a pair of pincers.

“I use the bone forceps to remove the posterior section of the atlas vertebra.”

His face pinched as he forced the bone apart. There was a splitting sound and a gush of fluid spread across the table and pattered onto the floor. Among the onlookers, necks were craned for a better view. Several non-medical members of the audience discreetly took handkerchiefs from their pockets and pressed them to their noses. The cheeks of Dr Ettis’s wards turned even pinker.

Aldini moved to the corpse’s thigh and cut out a section of flesh. “Then I make an incision in the muscle at the hip, to expose the sciatic nerve.” He moved to the ankles. “And a smaller incision into the heel, like so.”

Dropping the bloodied knife onto the tray, he picked up two of the long metal rods and used one of them to point towards the three tall column-like devices on the other table. Mr Pass busied himself running narrow wires from the devices to the metal rods in Aldini’s hands.

“These three mechanisms are Voltaic piles, which generate

electrical charge by chemical means. Each one contains forty discs of copper and forty of zinc. Their design is based on the recent work of my compatriot, Signore Alessandro Volta.” Casually and without pausing, Aldini touched the end of one rod to the exposed spinal tissue, and the other to the corpse’s dissected hip.

Instantly, the corpse twitched violently. The entire audience gasped with shock. Aldini turned the rods slightly, pushing them deeper.

The corpse jerked suddenly, its arms and legs folding tightly, its fingers balled into fists, its back arched. Every muscle tensed and shook.

The onlookers broke into a murmur of terrified voices. Aldini nodded to Mr Pass, who stepped forward, pulling on a pair of gloves. Aldini withdrew the rod from the corpse’s thigh and the body went limp. “Notice now the variation in response.” He inserted the rod into the heel incision. The body kicked sharply, its leg thrust out, juddering. Brushing the sweat from his eyes with his arm, Mr Pass took hold of the leg and tried to bend it at the knee, without success.

“The muscular force thus produced is greater than that possible in life,” declared Aldini. He plucked both rods free and the body of George Forster sagged back into stillness. “Here is the conclusion of my first experiment. My second demonstrates the revivification of the musculature in sequence.”

A man in the front row fainted, crumpling slowly to his knees before those either side of him grasped him beneath his shoulders and dragged him aside. Every onlooker was in a state of agitation, many quietly expressing their astonishment, some visibly trembling with nervous shock. A metallic smell of blood and heated skin had been added to the room’s miasma. Dr Ettis’s wards had their hands to their faces, while Ettis swung his gaze gleefully between the two of them. Dr Keate stood quiet and pale, struggling to retain his composure.

Paying no attention to all this, Aldini cut a small section of flesh from the corpse's forehead. Smaller rods were slid into the tissue, and back into the exposed heel. The larger ones were embedded through the corpse's sides into the chest cavity. Mr Pass, his hands shaking, took a few minutes to install a different set of wires between the rods and the Voltaic piles.

Aldini raised a wire in one hand and gestured towards the table with the other. The audience hushed. "You will observe a fresh arrangement of the electrical connections. I will complete the necessary connection using this length of copper, varying the galvanic effect as I do so."

He stood beside one of the Voltaic piles. He reached out and gently brushed the exposed end of the wire up and down the column of metal discs, which crackled and spat sparks.

The corpse shuddered. Its chest began to rise and fall. Its dead eyes suddenly opened wide and its face jerked into motion, the jaw and lips chattering as if trying to form words.

Screams from throughout the audience suddenly cut the air. Voices rose in terror. One cried out, "For the love of God, the man is returned to life!"

The face twitched, its expression unmistakably shifting from agony to horror to pain. The chest breathed spasmodically. The corpse's hands rose from the surface of the table, twitching, upturned, in supplication.

Dr Keate stepped back in shock, almost tripping over those behind him. A few onlookers fled, their footsteps clattering against the wooden floor. Mr Pass looked away, his eyes pressed shut. One of Dr Ettis's wards turned to leave but didn't get more than a couple of paces before vomiting. The other stared, aghast, tears running down her flushed cheeks, watching as the corpse mouthed piteously.

Aldini, unperturbed by the reaction, proceeded to his third experiment, severing the head of the corpse with a saw and galvanising the head and torso separately. After a little over an

hour, the demonstration ended and the meeting broke up. Some left without a word, others grimly congratulated Aldini on his remarkable and extraordinary results. Dr Keate calmed himself by directing the reorganisation of the room. Dr Ettis's wards left without him.

Three men, who'd been standing to one side, hung back a while. They approached Aldini once Dr Keate was out of the room and asked him a series of questions which told Aldini they had a knowledge of his subject that was at least the equal of his own. Adjourning to a nearby coffee house, the four of them spoke together long into the evening.



CHAPTER II

Friday 10th October 1879

The young woman—or so she appeared to be, to judge by her bearing—made her way down the gangplank and stepped ashore at the Millwall Docks. From the moment she did so, she was an object of curiosity. It may have been the air of mystery which surrounded her: the dark cloak, the hood pulled low over her face. It may have been her shape or the way she moved: tall and slender, walking with an oddly flowing, almost rocking gait. It may have been her long, thin fingers, pale and nail-less, gripping the edges of her cloak together. It may have been the man who walked beside her, cautiously, his hands fluttering at her sides almost as if he was herding geese. He seemed concerned not only that nobody should bump into her, but also that he should avoid any kind of contact with her himself.

The man was stocky and middle-aged, but at that moment looked older than his years. His face, with its slightly beak-like nose and straight line mouth, was sallow and lined. His matted hair and side whiskers merged into the heavy stubble across his rounded chin, unshaven for days. His clothes, which had clearly once been smart and well-tailored, were dishevelled and grubby

from the long journey that he and the young woman had just undertaken. His name was Professor George Hobson.

As the two of them moved forward, his expression wrestled with itself, at one moment attentive and alert, the next filled with an uncomfortable introspection. He seemed as if ice water was slowly dripping through his veins. If the attention of observers had strayed away from his companion, they would quickly have realised that he was afraid of her.

Behind them, the battered old cargo ship on which they'd arrived from Ostend, the *Freya*, was preparing to unload. The captain bellowed orders to his crew in French, his long moustaches flapping like curtains as he spoke.

It was almost six o'clock in the evening, and the docks were crowded and noisy. London was beginning to breath out its workers, just as it had breathed them all in twelve hours earlier. From home to work, work to home, in and out, inhaling and exhaling the industry and economy of the city. A steady flow of people pulsed through the capital's streets and alleys, blood flowing through the veins of a living creature.

Above the city, dense, yellowish clouds circled with an aching slowness. The belching fumes of a hundred thousand chimneys clotted into a thick, sluggish blanket which spanned the sky and blocked out most of the remains of the daylight. At ground level the air felt thick, used so many times and heaved through so many lungs that it was heavy and exhausted, reeking and throat-scratching. The air, as everything else, was choked with grime and soot, the combined oil and filth of machinery, factories and more than three million human beings.

The dampened pollution in the atmosphere made the outlines of the city hazy and grey. From the docks, to the south across the Thames, there was a low horizon of roofs. To the west, a forest of ships' masts on the tea clippers berthed downriver at the East India wharfs, a mass of gently waving vertical lines set against the simmering clouds.

The river snaked away in a wide arc, boats of every size and shape struggling along it. Just visible, in the middle of the irregular cut-out of the skyline, was the Palace of Westminster. To its right, the dome of St. Paul's, blackened with soot smuts and smoke, the tallest building for many miles.

There were about two hundred people scurrying around the Millwall Docks. Dozens of steamers and sailing vessels were being loaded and unloaded. A small commuter ferry was heading for the opposite bank, filled with neatly dressed men. Beggars huddled in corners, or were sent packing by boatmen. A newspaper seller yelled at the quayside, flipping out large, thin sheets to customers as they passed. Street vendors, come to catch the late afternoon trade, called out their wares.

"Penny slice o'pineapple!"

"Bootlaces! Fastenings!"

"Rat poisons and fly papers here!"

The river was restless, unusually choppy, slopping up against the sides of all the sea vessels. The surface of the water was oily with vegetable and animal matter, industrial and human wastes. Its putrid smell was at its worst here.

Professor Hobson pressed the back of his hand to his face. He'd lived in London for most of his adult life but had never got used to the stomach-turning stench of the river. On most days, the stink drifted for miles.

"We'll catch a cab on the road," he said to the woman, raising his voice above the shouts and noise. "At the top of the bank, up the steps, over there. Do you see?"

Her pulled-down hood turned, then nodded.

The professor was getting steadily more anxious as the crowds around them were getting thicker. They were jostled as people bottlenecked along the only path that ran parallel to the road.

Behind them, a young man in a hurry spotted a gap and put on a sudden burst of speed. He pushed his way through, nudging several others towards the edge of the quay.

The ripple of movement pressed against a haggard-looking woman, dressed in rags and grime, who was standing on the lip of a wooden loading platform which jutted out over the brown, swirling water. An equally dirty and fearful toddler clutched at her skirts. Around her neck hung a tray of matchboxes which she held out at passers-by, silently, her face pleading.

The shove of the crowd made her take a sudden step back. The child at her feet let out a sharp, startled cry as she lost her balance, glancing down into the filthy river below, matchboxes tumbling. She let out a hoarse shriek.

The cloaked woman suddenly sprang away from the professor's side. A single, sharp motion took her to the toppling woman's side and with one hand she lifted both the matchbox seller and her child clear of the water before they fell, just as the yelping child's bare feet broke the river's cold surface.

There was a collective gasp from those around them. The steady flow of people all but stopped. The hood and sleeve of the young woman's cloak had flown back, leaving her to look openly at those around her, an expression of nervous defiance on her face. The small crowd stared back at her with baffled shock. Fearful whispers asked who or what she was.

She was pale, almost to the point of translucence. Her skin was delicately mottled and veined, as if she was made of living marble. The features of her odd, vaguely unsettling face were large but very slightly uneven, the bone structure beneath appearing to be a little off-centre. She had eyes that were a clear blue, icy and piercing, and the set of her mouth gave her a look half way between smile and sneer. Straight, copper-shaded hair fell around her shoulders. She had a strangely macabre presence, her intense gaze flitting from person to person like a searchlight.

For a few seconds, there was silence. Professor Hobson, momentarily frozen in dread, finally hurried back to her side.

An old lady at the front of the crowd, bent with age, shuffled back from the strange young woman. She clutched at her neckerchief,

strands of greasy grey hair swinging over her gnarled fingers. "Oo's this?" she breathed, to nobody in particular. Her watery eyes remained fixed on the stranger. "She's lik' a ragdoll, she's lik' a little wax dolly. Wha's 'appened to 'er, then? I not seen nothin' like that face in all my puff!"

Her words seemed to break the tension that was holding the crowd still. Voices became louder. Fingers plucked at the strange woman's cloak and she flinched.

The professor, regaining his composure, raised his hands quickly. "Please, please, all of you, there is nothing to see here." His voice was cracked with nerves. "I assure you all, there is no need for alarm. I am a scientist and ... er, I am escorting her ... to, er, a hospital."

He indicated for the young woman to replace her hood. She did so and he ushered her forward. The crowd made a wide parting, watching both of them with suspicion.

"Hey," cried the old lady, "she's not got no pox, 'as she?"

A sharp ripple went through the crowd. The professor swiftly turned and raised his hands again. "No, oh no, I do assure you. She has no disease. You are at no risk, you have my solemn word. She has ... er, a medical condition, sensitive to light, hence the hood. Simply, er, a form of advanced anaemia. Treatment will quickly restore her to full health, thank you."

He hurried her away. The old lady's voice tailed after them. "Poor luv. I seen it all now. Bless you, Mister Scientist, it's a miracle what they can do these days."

The professor hurried his companion up the stone steps at the end of the quay. At the top, close to the road, he looked back. The flow of people appeared to have returned to normal. The momentary side-show was over.

Relief turned his nerves into anger. "Maria, did you not listen to me?" he hissed. "Did I not stress the importance of secrecy?"

The young woman fixed her blue eyes on him. "You did. Many times," she said irritably. Her voice was as oddly unsettling as her

face. “Although why remains a mystery.”

As they made their way up to the road, Maria’s mood softened. “I don’t know why I saved them,” she said suddenly. “It didn’t make sense. I’m sorry, you’re right, it was a stupid thing to do.”

The professor ran a hand through his wavy hair. “I’m not saying that. It was—brave. I’m sure they’re grateful to you, but ...” His words tailed off.

The sky was growing darker and a night-time smog was beginning to curl itself around the city’s extremities. On the other side of the road were rows of tall warehouses, the names of shipping companies painted in white above sets of gates. Cabs were being picked up from a long line which stretched the length of the docks.

The professor led the way to a compact four-wheeler. The cabbie, muffled against the cold in a thick woollen scarf and bowler hat, broke off from brushing down his horses and vaulted up into the driving seat as they climbed aboard.

“Kensington,” called the professor. “Wenham Gardens.”

The cabbie called back something that was halfway between ‘righto’ and ‘giddyup.’ With a snap of the reins, the horses clopped into a steady pace. Inside, Maria and the professor rocked and juddered with the motion of the cab.

The professor caught sight of his reflection in the window of the cab’s door. He was suddenly shocked at how aged he looked, how tired and drawn. He was used to seeing a well-fed face but he looked thin and lank, his eyes glazed and distant. He longed for sleep, but knew he couldn’t rest.

He turned to look at Maria as the cab rattled westward, through London’s thickly mudded streets. Londoners flashed in and out of sight. With a flush of renewed fear, the professor wondered what all of them would think, if they knew exactly what was being carried past them at that moment.

Maria was intent on watching the city go by, taking in every detail of people and buildings glimpsed in the shadows or in oases

of gaslight. She spoke softly, without taking her eyes off the road. “Professor, I know my head has been clear for little more than a day, but something is already weighing on my mind. On the ship, when we were sitting on the deck, I knew perfectly well that I was looking out to sea, that I’d experienced that sensation many times before, that I’d smelt salt in the air. Yet I also knew that I’d never seen a sea before in my life. Ever.” Her fingers strayed along the window sill beside her. “And now I know this material, that lines this cab, is called silk and that I’ve worn garments made from it. Yet, I know *for certain* that I’ve never before touched anything like it. It’s an extremely unsettling feeling, and I have no way to explain it.”

She paused for a couple of minutes, gathering her thoughts, her attention remaining focussed outside. The professor sat silently, feeling his heart race.

“Our encounter back there at the docks,” said Maria, “has shown me beyond doubt what I already suspected, that I am abnormal.” She paused again. “Profoundly abnormal, in mind and body. Those people were afraid of me. You are afraid of me—I’d like to know why.”

Professor Hobson was glad that her gaze remained on the street because he couldn’t have looked her in the eye. Instead, he turned away in shame-faced embarrassment. A flood of sadness nearly set his jaw shaking. He tightly pressed his teeth together. He felt exhausted and drained, and wanted no shameful display of emotion.

After a while, Maria said, “This is a very old city.”

“Yes.” The professor cleared his throat. “Yes, that’s right, it is.”

Maria glanced up as the cab passed an imposing Georgian building. “There’s such a mixture. You can see where some things were fitted in around others, much later.”

“Indeed.”

They rode on in silence. At last, the cab turned a sharp left into Wenham Gardens and came to a stop halfway down a long

terrace. The tall houses were almost identical, a solid bulwark of respectability—clean bay windows, steeply pitched roofs, painted front doors and freshly whitewashed doorsteps. The trees that faced them, on the opposite side of the street, swished gently in the twilight.

The professor paid the cabbie, grumbling about the fares charged at this time of day. Maria stood looking up at the house as the cab clopped away. The professor took hold of the iron railings above the steps leading down to the basement level.

“This is my home,” he said. “I hope you’ll, er—well, hope that you’ll consider this, in time, your home, too.” He fumbled in his pockets. “Fortunately, I still have my key. The blackguards left me that, at least.”

Moments later, they were standing in a narrow entrance hallway. A yellowish gas light flickered on one wall, throwing dancing shadows across the tiled floor and up along the banisters on the stairway. Maria shrugged off her hood and ran the tip of her middle finger over the patterned wallpaper and wood panelling.

Struggling out of his travel-soiled coat, the professor called up the stairs. “Millie! Millie!” He turned to Maria. “Millie is my maid-of-all-work.” He was flustered, shifting his weight from foot to foot. He was a bachelor, set in his ways, unused to having house guests at the best of times, and the macabre oddity of having this one to stay was only now beginning to sink in. “Millie lives in. My housekeeper lives a few streets away. Mrs Sewell. As I haven’t been home for a while, she’s probably left for the night.” After a moment’s awkward silence, he leaned over to shout up the stairs again. “Millie!”

A girl of about seventeen appeared, running up from the kitchen and scullery in the basement, flattening her apron against her plain green dress as she trotted along the passageway. “Sir!” she exclaimed. “You’re safe! Sir, we were so worried about you, Mrs Sewell got a bill from your hotel in Paris, she went to

the police she was so worried, the hotel said you'd vanished!"

He patted his hands in mid-air. "Thank you, Millie, I'm very glad to be home at long last but, as you can see, we have a visitor."

He stepped aside and Millie had a clear view of Maria for the first time. She blinked, confusion clouding her freckled face for a moment.

"Yessir," she said, bobbing a curtsey to Maria. "Please to meet you, ma'am. Miss. Ma'am."

"This is Maria," said the professor. "She is, er, under my care. She will be staying with us for, er, a while."

Millie's eyes never left their guest. "Yessir, may I ask, sir, what's been happening? You've been gone for more than three weeks, sir, and begging your pardon but you look done in, and I don't quite—"

"I'm sorry, Millie," said the professor, more sharply than he intended. "There will be time for explanations. I take it Mrs Sewell has gone home?"

"Yessir."

"Very well. The moment she arrives in the morning, the two of you are to come straight to me. Is that clear? Straight to me."

"Yessir."

"There is important business to discuss with you both, tomorrow. However, from this moment on, Millie, you are under one very strict instruction. You are not to mention the presence of Maria in this house to anyone. To anyone at all. Do you understand?" He held up a finger for emphasis.

"Yessir."

"Not next door's cook. Not the butcher's boy. I've seen you gossiping."

"Sir," blushed Millie.

"And I'll be saying the same to Mrs Sewell." He took a long breath. "Now then, Millie, we've all had an extremely troubling few days. Please settle Maria into the spare room and arrange a cold supper for her from, er, whatever we have in the larder."

He looked back and forth between the two women. “She may also appreciate a bath. Once all that is sorted out, I’d like some hot water myself, if you’d place it on my night stand, please. Er, for some reason I’m not terribly hungry, I’ll fetch myself some whiskey and I’ll be in my study for a while.”

Millie nodded. “Sir.”

The professor turned to Maria. “Er, well—goodnight. I would say ‘sleep well’ but of course you—the spare room is where I store part of my library and back numbers of various periodicals, so please feel free to, er—”

Maria sensed his discomfort. “Thank you, professor,” she said quietly.

The professor nodded and retreated to his study, further along the passageway. Millie lit an oil lamp and, suppressing her own disquiet at their guest’s odd appearance, led Maria upstairs. Beneath the well-worn stair carpeting, the wooden boards creaked. With his study door open, the professor heard the nerves in Millie’s voice.

“I’ll fetch you the bath from the downstairs, Miss,” she said. She dropped into a stage whisper. “We still use a tin one. We don’t have one of those bathrooms yet, the professor says it’s a needless expense. He pinches the pennies, Mrs Sewell joshes him over it.”

For the first time in many days, the professor smiled.