Prologue

McGuire Air Force Base, New Jersey, 40°0'N, 74°35'W
April 1948

The aeroplane, a modified Douglas C-47 Skytrain, is a fat, shining cigar of aluminium, brilliant in the sun. The word *Arcturus* is stencilled on the fuselage in a confident upward sweep. The journalist has done his homework, but there are things he does not know: for example, that grease monkeys spent days polishing the skin, and that the name has been added especially for this trip – a celestial name deemed more heroic and appropriate than the boring clutch of numbers on its tail. The Skytrain was a bomber throughout the war, but now it is carrying an overtly peaceable cargo; there are air-force men, it is true – weary eyed, beribboned and grizzled – but there are also scientists from several universities, a camera crew from ABC, the journalist.

The film crew takes some footage of the scientists standing by the plane. When ordered, they wave and smile, raggedly, never all at the same time. The air-force men stand to attention until their commander smiles – then the rest of them relax a little, but not as much as the civilians. There is one last arrival – a special guest – a British woman of advanced years, who was known, for a time, fifty years before, as the Snow Queen.

When the old lady – white haired, erect and rather forbidding – is introduced to the scientists, the Harvard physicist claims that his

father met her many years ago and had spoken of her to his family. The Snow Queen nods and moves on, giving no indication whether she remembers the father, or was even listening to what he said. The film camera whirs, recording the handshakes. The journalist thinks that, in the resulting film, there will be a graphic of a globe, a tiny plane crawling over it, dragging a dotted line across the world. The thought thrills him.

At last they are ready to embark. Randall is nervous – not of the flight, not really, although it is his first – but because he wants to bag a seat next to the old lady. He has been thinking about this meeting for months. She doesn't look at him as he sits down, but stares out of the window. He buckles himself in, opposite the oceanographer from Harvard, behind the civilian whose field of expertise no one seems quite sure of, who is engrossed in an automobile magazine. They take off with a tremendous roaring, a steep upward trajectory that drags him back in his seat. His scalp prickles. Quite quickly, the nose of *Arcturus* levels off, the plane swings round, and fierce sun stripes the cabin, blazing off one face after another.

Randall turns to his neighbour and attempts to start a conversation, rather hampered by the din of the engines.

'I have some of your old press cuttings,' he shouts.

She frowns, probably because she can't hear a thing.

'Your press cuttings!' he yells.

She frowns some more.

'It was such an exciting time. You knew everybody.'

'Who are you?' she asks, although they were introduced on the ground.

'Randall Crane . . . Crane! Hi! I've been commissioned to write up the trip for *World* magazine.'

'The journalist.'

She might as well have said, 'A cockroach,' or 'A hernia.' Something decidedly unwelcome. She looks away, through the window next to her, to where sunlight burns on a smooth field of white cloud.

'It's beautiful! Is this what the Arctic looks like?' He leans towards her, eager and also moved, made almost breathless by the strength of the light, the hot blue of the sky. After the visceral experience of take-off, it feels as though they aren't moving at all.

'You've never been there.'

'No,' he admits, cheerfully. He can't help grinning. He has been told he has a winning smile. 'I can't wait to see it. I hope you don't mind me saying: I've been reading about you.' Does she cock her ear towards him, slightly? Flattery never fails with these old birds. 'You were a superstar. You knew all the explorers, didn't you? Armitage, Welbourne, de Beyn and the rest? It was an amazing time. All those discoveries. You were a pioneer.'

'Well, yes.'

'And the . . . the controversy – I've always been fascinated by what happened. What was your take on it?'

He could slow down – should, probably – but he's so full of energy; it bubbles up through him like an unstoppable spring.

'What controversy?'

'The Armitage–de Beyn controversy . . . The mystery over what happened to them. You knew them, didn't you?'

'Goodness! It's such a long time ago. They're all dead, except me.' The way she says this – it is impossible to tell whether she feels satisfaction or regret. 'What does it matter now?'

'Doesn't the truth matter?' He gazes hopefully at her eyes, which avoid his, and give nothing away. 'No one seems to know what really happened. I'd love to know what you think, as someone who was there.'

'"What really happened"?' She smiles, not at him, but for herself. 'You flatter me if you think *I* know the truth.'

'I'd like to know your opinion. Could I talk to you about it?'

'It's very noisy here.'

'Oh, yes – not here, of course. It is noisy, isn't it?'

The Snow Queen leans her head back against the seat, her eyes angled out of the window. She looks tired – but, to Randall, from his unassailable vantage point of twenty-seven years, old people always look tired. She must be – what? – seventy-seven. Older than his grandmother, Lottie. Her hair is as white as the clouds outside; her eyes, dark grey, unreadable, like boring pebbles. She wears discreet make-up, so she cares what people think. That gives him hope. He has done his homework on her, too: read her books on the north, and trawled the archives for contemporary accounts. Newspaper reports from the 1890s described her as beautiful, although he found this hard to verify from the accompanying photographs – usually blurred and tiny; she tends to be one of a group of white-faced people staring at the camera, wearing hats. Lined up at the gunwale of a ship. Standing on a quay. At the front of a lecture theatre. But there was one portrait, taken when she was in her early twenties: it is a studio-based fantasy, wherein the girl known as the Snow Queen poses stiffly in front of a painted icy landscape, her round, smooth face emerging from a halo of furs, lips closed, her eyes fixed on an imaginary horizon. A thick snake of hair winds over her shoulder. Handsome, rather than beautiful, in his opinion. If Randall stared at the picture for long enough, he felt he could discern something in the wide-open eyes, but what was it? Arrogance? Ambition? Alarm? Almost any emotion, once he thought of it, could be imputed to those frozen features. Like most old portraits, it tantalised, and revealed little.

In the seat next to him, the Snow Queen's eyes are closed. He cannot see the girl she was in her face. He suspects she is not asleep. His grandmother claims never to sleep – says you dispense with the need when you get old. Randall looks around him. Some of the scientists are dozing; some reading magazines (not *World* magazine, he notes).

He is not in the least discouraged. They have hours to go before they reach their destination.

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Flora Cochrane (her name has been many things, but this is the one she will have when she dies) awakens with a jolt. She was dreaming about places and people she has not dreamt about for decades. Her mouth tingles with the remembered pressure of warm flesh. A surge of erstwhile feeling has washed through her. Years since she had such a dream. For a moment she cannot think where she is. An infernal noise hammers her brain. The surroundings are distressingly bright. Then the lissom feeling in her body evaporates, and she remembers that she is old. A juddering – ah, yes, she is on the plane. *Arcturus*. She looks round to see the absurdly young man next to her; he turns towards her, too quickly. She keeps her eyes unfocused as she scans the cabin, wondering if she moaned in her sleep. But no one is looking at her. They couldn't have heard her anyway.

'We're just coming down to Newfoundland, now.'

He leans towards her and shouts in her ear. Flora nods minutely without meeting his eye, hoping he won't start another conversation. She would like to go to the bathroom, but doesn't remember anyone mentioning whether there was one on board. Although she was once used to it, it is still tedious to travel in all-male company. As they descend through a layer of clouds, the plane performs a series of bumps and bounds, like a small ship in a crossing sea. All very interesting, this mode of travel. They have come over a thousand miles in just a few hours. Think of all the walking that would have entailed. Even sailing, travelling at the speed of the wind, it's a distance that would have taken days. Now she leaves the wind far behind. It is as well she is speeding up, she thinks. At her age. The thought slots into her head: how he would have loved this. He would have laughed with delight . . .

'What's funny?'

The young man is smiling, tenacious. But his familiarity is less irritating than she would have thought. There is something charming and puppyish about him; perhaps it is his brown eyes, or his hair, which flops across his forehead, untamed by the pomade he uses; or his slightly buck teeth, eager to show themselves.

She shakes her head and points to her ear – the engines are roaring harder. He nods and gives her his pretty smile, biding his time.

RCAF Station, Gander, Newfoundland, 48°57'N, 54°36'W

They have landed at an airbase by a crooked-finger lake in Newfoundland, which, though far from luxurious, is designed to cater for women as well as men. They even rustle up a woman for her, to show her to her quarters and explain how to put on the extraordinary padded garment they expect her to wear tomorrow; it looks as though it was designed for giant babies, or lunatics. The woman, who has solid-looking hair and a smear of lipstick on her teeth, shows her how to put it on. There is a flap that zippers open and shut around the bottom, 'For, y'know, emergencies? We recommend you practise while you're here, to get the hang of it.' She is tactful enough about it, but still.

'How long is it since you were up there?' the woman asks – someone did introduce them, but Flora has forgotten her name.

'Oh, hundreds of years. During the last ice age.' She smiles to show it is a joke rather than a put-down. The woman laughs, mechanically, without humour. Flora has never been good at humour. She tried it for a while, in her twenties, then gave it up. She decides to make amends. 'I'm surprised they asked me. That there wasn't anyone more . . . important.'

'Not from that time. You've outlived them all,' says the woman, smiling. 'Good for you.'

Flora is annoyed.

'You know,' the woman goes on, 'When I was young, I used to read about you and your expeditions. It was so inspiring to think that a woman could do that, even then.'

'Well . . .' Perhaps she has misjudged her. 'It wasn't easy. I'm sure it's not easy now.'

'No. Things changed a bit during the war, but since then, when all the men came back, we've kinda had to get out of the way, if you know what I mean.'

She does up the zipper with a noisy flourish. Flora isn't sure she does know what she means, but nods.

'Thank you. I think I can manage now.'

'We're having dinner in an hour. I expect you'd like to get some rest before then. If you need anything, just holler.'

As she closes the door, she finally remembers the woman's name – Millie . . . Mindy . . . something childish like that. She is aching to lie down. Sleep. Perhaps recapture that feeling from the plane . . . Then, afterwards, maybe she will allow herself to have a cocktail. One of those sweet, deceptive things she had in New York. She stretches out on the bed with a sigh of relief.

It will be twilight for hours. The clouds have gone. The air is very clear and still. She hasn't seen air this clean for years, but then it is years since she has been this far north. Through the window, she acknowledges the faint, familiar stars as they rise. There is Arcturus, which the Eskimos call the Old Man, *Uttuqalualuk*. She cannot remember the names of the people she met earlier today, but those names learnt so long ago, she has never forgotten. There, just above the horizon, is the Old Woman – Vega. The Caribou, known to others as the Great Bear. Cassiopeia: the Lamp Stand. And, just rising now, with its faint hint of red, the ghoulishly named *Sikuliaqsuijuittuq* – the Murdered Man.

She opens the window and leans out, inhaling the chill, blue air. She cranes her neck to look for Draco, coiling around Polaris, and searches for Thuban, its once and future Pole Star. She stares until

her eyes water, but it must be too early, too light, or perhaps her eyes are too tired, and she cannot find it.

Since she knew she was coming on the flight, she has been thinking again of that time. She closes her eyes and can see the valley spread out in front of her: duns and greens and greys; minute jewels of colour; the lake of breathtaking blue. Impossible Valley, they called it. But it was possible, if only briefly.

Recently, her old friend Poppy fell ill and Flora had managed to see her, before it was too late. Lying in bed, looking tiny and somehow both sexless and ageless, she had talked calmly about her approaching death. She believed in heaven. She knew that she would meet her sons there: reluctant soldiers, unwitting martyrs.

Flora nodded but could not in her heart agree (though who was she to say what Poppy did or did not know, or which of their beliefs was true?). She would like to believe in heaven, of course, but that has always seemed too easy, too trite; if it were true, why would one go to all this bother down here? Besides (she thought, but did not say), heaven is here on earth. She knew; she had been there.

PART ONE

A PEG, SHAPED LIKE A WHALE

'A glass ~~vile~~ vial of POISON. An iron hook. A copper penny. A length of red ribbon. A bronze pin (bent). A handkerchief with embroidry. A peg, shaped like a whale.'

Chapter 1

At sea, North Atlantic
Summer 1883

This was a list of the things that Flora stole on her first voyage. There were other items, but she only wrote down her favourites. For years, until it disappeared, she kept the peg whale as a talisman – it was carved of a pale, close-grained wood, very smooth, with the merest blunt suggestions of head, fins and tail. The eyes and blowhole were burnt in with a hot awl. It fitted beautifully in her fist. She had coveted it when she saw it in a boat steerer's hand, and when she found it lying in the scuppers, she pocketed it without scruple. It was forfeit, on its way back to the sea; she felt she had the right.

Flora Mackie was twelve when she first crossed the Arctic Circle. The previous November, her mother had died, and her father did not know what to do with his only child. He was the Dundee whaling captain, William Mackie. Flora took after him in looks and brusqueness of manner, and showed no sign of her mother's grace. Elsa Mackie had been a pretty woman who delighted in her decorative capacity. Her husband was proud of her, but a whaling captain's wife in Dundee – no, anywhere – had limited opportunities for displaying her charms. She had been horrified by the process of producing Flora, and was critical of the results, having a tendency to bemoan her daughter's

shortcomings: chiefly, hoydenishness, and a thick waist. Before Flora could talk, Mrs Mackie had developed mysterious, lingering ailments, and left Flora's upbringing largely to a nursemaid, Moira Adam, who was efficient, but had a heart of Doric granite. In the last few weeks of Mrs Mackie's life, after the captain had come home from a successful season in the north, he and his daughter sat together in the front room while, upstairs, Mrs Mackie consulted a succession of doctors. When she died, the widower was not so much grief stricken as haunted by guilt – if he had stayed at home, instead of leaving her for up to two years at a time, he thought, she might not have died. What if the same happened to Flora?

Other captains took their wives north, he reasoned – to himself, since he was not a man people argued with openly – so why should he not take his daughter? He had been in the Davis Strait so many times it no longer seemed to him a particularly hazardous place. People talked, although, having few friends in the town, he did not know this. He should have farmed her out to a relative, they said. He should have sent her to a boarding school, a foster home, a convent. But Captain Mackie did not know what people said, and would not have cared. He had spent most of his life on board ship, where, for the last fifteen years, he had been captain and absolute ruler under God; he was accustomed to getting his own way.

So, in April of 1883, Flora and her father set sail from Dundee in the whale ship *Vega*. No good would come of it, people muttered. What they meant by this, no one was prepared to say, but she was a young girl on a ship full of men, going to a land of ice, a sea of blood. It was unprecedented; it was immoral, in some way. It was definitely wrong.

Much of Captain Mackie's confidence in his daughter's safety lay in his ship. The *Vega* was a Dundee-built steam barque of 320 tons, from Gourlay's shipyard, her hull reinforced with six-inch-thick oak planks. Her bows and stern were doubly reinforced – her bows were three

feet thick – and twenty-four-inch-square oak beams, each cut from a single trunk, were placed athwart-ships to brace her sides against the pressure of converging ice floes. Captain Mackie, who had sailed in the seas around Greenland for the best part of thirty years, thought her the finest ship Dundee had produced. He was an owner-captain; that is to say, he owned ten sixty-fourths of the *Vega*, but he loved all of her, with a proprietor's love, as well as the love a captain feels for a brave, willing boat. He had captained her for nine years, and was convinced that, in her, Flora could come to no harm. He couldn't have placed the same confidence in some of the other ships, now – naming no names, but glancing at the aged *Symmetry*, not to mention Peterhead's wicked old *Fame* . . .

The *Vega* was neither large nor beautiful – Davis Strait whalers were, on the whole, small, stout and slow – but to Flora she was marvellous: massive, dense; the weight and heft of her oak, awe inspiring. She loved the thickly varnished gunwales that she could barely see over, smooth and slightly sticky to the touch; she loved stroking the silky brass-work, rubbed to a soft, liquid gloss. When no one was looking, she straddled the enormous ice beams, unable to imagine anything that could vanquish them. And she loved her name. The rest of the fleet had names like *Dee*, *Ravenscraig* and *John Hammond*, so the *Vega* felt to Flora like a doughty wood-and-pitch ally: the sister she had never had and, in the relentlessly masculine world of the north, a female confederate she would appreciate. And, from the first time she walked up the gangway, she even liked her smell: dark and bitter, of tar, salt, coal and – faint after a winter in dock – a hint of her summertime carnage: the smell of fat, blood and death.

With fifty men and a girl on board, it was a crowded ship. Often she was, nominally, alone – in the cabin, when she was working on her books – but wherever she was, she could hear a full symphony of human noises. Apart from talking, shouting and occasional, quickly

hushed, swearing, all day and night there were grunts, groans, farts, laughter, cries, snores and sounds less identifiable. Flora heard much cursing through the wooden walls. She pretended, if her father was around, that she couldn't hear it – and if it was unmistakable, that she did not understand it. In that way, the ship was no different to the streets of Dundee.

Her father did his best. She shared with him the tiny great cabin, divided down the middle by a blanket that slid back and forth like a real curtain. She had a cot slung from a beam, so that it stayed more or less level while waves pitched and rolled the ship. It had lipped sides like a tray, and she swung in it, wrapped in blankets, and later on in furs, like a sausage in bacon.

While still in Crichton Street, she had heard – she was a shameless eavesdropper – all sorts of gossip about sailors which fuelled her imagination. Sailors did vague, excitingly terrible things to young girls, but on the *Vega* they were kind and deferential. Just in case, Flora had prepared herself with a weapon: a penknife that lived on a thong around her neck, under her chemise.

In her heart of hearts she did not believe that any harm would come to her from the sailors; apart from their kindness, she knew she was not alluring, being plain and thickset, with a round, whey-coloured face and stone-grey eyes. She had learnt early in life that there were those who were caressed for their physical charm (like her mother), and those that were not; those who drew glances in the street, smiles from strangers, favours – and those who passed invisibly, like ghosts. She was used to being invisible. But it was as well to be prepared, and, in her imagination, she could be (why not?) golden haired and fragile, with a heart-shaped face and violet eyes, like the diminutive heroine of her favourite book, 'Poor Miss Caroline'. Never mind that she had never met anyone with violet eyes (nor, come to that, a heart-shaped face). There were nights when she swung in her cot, imagining assault from faceless assailants

– imagining, too, her violent, blood-spattered response. She enjoyed these thoughts. Sometimes, rocked in the resounding darkness, she allowed herself to be overpowered. She enjoyed those thoughts, hazy though they were, also.

Captain Mackie ensured that Flora maintained an education of sorts. By the end of their voyage, she should have read the Bible, preferably learning the Gospels by heart, have studied the glories of God's creation in the form of the natural world, and have an idea of All The Things That Have Occurred Up To This Point. He insisted that she keep a journal describing what she had read, proving that she understood it. He bought a number of notebooks for the purpose.

Flora stared at engravings of plants and birds. *Today I studied Passiformae*, she wrote in the journal entitled, *What I Have Learnt*, by Flora Elsa Caird Mackie. *They are Perching Birds. There are very many species of them. E.g. Blackbirds.* This seemed to keep her father satisfied. She worked her way through *A Child's History of the World*, and thus knew that history started with the Egyptians, followed by the Greeks and the Romans. Then there was Jesus, after which, things went downhill. *A Child's History* was tantalising but vague. She had the impression that history got more boring the nearer it came to the present day. By their own century, long gone were gladiators, embalmed cats and cups of hemlock, replaced by monarchs who no longer wanted to murder each other, ever-increasing agricultural yields and the spinning jenny. Flora was disappointed. She longed to know more: how exactly did gladiators kill each other? How could a Pharaoh marry his sister? What did hemlock taste like and how long did it take to die? (Did you vomit, suffocate or bleed to death?) On these subjects, and much else of real interest, *A Child's History* was mute.

On the second day out of Stromness, Flora took another of the notebooks, and paused for a time before opening it. She was thinking

about the groaning she had heard on the other side of the bulkhead the previous night. Her father slept, snoring quietly. She had been obscurely afraid, wondering if the man was ill, but fearing, in a way that she could not identify, that he was not. She did not sleep for the rest of the night.

She did not write anything on the cover of this notebook, but opened it at the back page and started to scribble in tiny, terrible writing. Perhaps she did this because, in a place where privacy and solitude were illusory or impossible, Flora had a need for secrets. So, on the day she had breezed through the order of passerines, read a chapter about the Greeks and skimmed through part of Matthew's Gospel, she took the nameless diary and wrote, *I don't like birds. They don't have fur and I don't like the way they look at me.* The only birds she saw now were the gulls (definitely not passerines) that landed on the ship's rail – you could argue that they perched there, but somehow not in a way that counted – and stared at her with glassy, impudent eyes.

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The *Vega's* officers – harpooners, boat steerers and line managers – were all from Dundee and the Fife towns – Cellardyke, Pittenweem, St Monance; but the oarsmen were Orkadians. Out of fifty men on board, eleven were called John, seven Robert. Flora made friends with the youngest Robert – a first-voyage apprentice from Dundee, called Robert Avas. Robert was a year older but some inches shorter than Flora. He had the white, pinch-faced look common to children from the fish market, but an irrepressibly sweet nature and boundless enthusiasm. He had never heard of the Egyptians, and thought that Newcastle was the capital of London. Flora was mightily impressed by such ignorance.

'I could teach you to read,' she said, when they had known each other a week.

'Read? For why?' he answered, grinning.

'So . . .' Flora was taken aback. 'So that you could read.'

'What would I read?' he asked, genuinely curious.

She paused, wondered what would hold the most appeal. 'Well . . . newspapers.'

'Ach, they're fu' o' nonsense.'

She shrugged. 'Stories. About sailors . . .'

'I reckon I'll get to know enough about them as it is.'

A tremendous noise broke over them like a wave: loud, deep cries came from the fore-rigging – the Orkneymen were raising sail, chanting a mysterious incantation that contained no words you could pin a meaning to. Flora stared at them with a kindling of unease; the Orkneymen were big – taller and broader than the men she was used to. They had sandy hair and raw, reddened skin; jutting cheeks and brows. They spoke a different language. Their chant had a glamour that stirred something inside her.

'Can you understand them?'

Robert turned candid blue eyes on her. '*Vou, vou!*' he shouted, imitating the men's weird cries. He laughed, and shrugged. The time they spent together was irregular and liable to be broken off at any moment by yelled commands; Robert would leap to his feet and scramble up the rigging, or disappear below. Flora experienced frustration at this, not envy; it wasn't that she particularly wanted to climb the rigging, but, as soon as he turned away, she knew Robert forgot her existence. He had a place in the running of the ship, which she – a supernumerary, and a girl – did not.

Her only other friend on board was the surgeon, Charles Honey. Like most surgeons on whale ships, he was a recent medical graduate without the means to buy a practice. He was twenty-three, but looked younger, with a fresh complexion and an air of bewildered innocence. He suffered from appalling seasickness for the first two weeks, and the sounds of his misery could be heard throughout the ship. At first, the sailors were sympathetic, but after a few days their sympathy

turned to hilarity. Captain Mackie spoke sharply to the men, but was tight-lipped. He hadn't been able to find anyone else. Since Honey was usually on his own in the sick bay, Flora wasn't afraid of seeking him out, and since she was a little girl, and not a pretty one, he wasn't afraid of her being there. He was the least alarming of men: slight, gentle, with a hesitant voice. He blushed easily.

It was in the sick bay that she first became aware of Ian Sellar. They were beating into a north-westerly at the time, the *Vega* straining at her seams. Honey's bottles and jars rattled in their cages; on a lee lurch, a mug of coffee skated down the slope of his desk, slopping its contents but holding its footing.

Flora was perched on the sickbed, her back braced against the cabin wall, pestering Honey with questions about dissecting corpses. She had ascertained during previous interrogations that medical students did this, but he was prevaricating – he was, in short, lying to her. As the captain's daughter, she had a certain borrowed authority and he was unwilling to put her off, but he was also worried that the captain would be angry if he filled his daughter's head with nightmares.

'What force of wind is this?'

He treated Flora as a conduit for her father's seafaring knowledge, a tendency she did nothing to discourage.

'Oh about –.' another lurch as the North Atlantic slapped the ship in the bows – 'a force six . . . or five. Five, I'd say. It could get very much worse.'

'I do hope not, or I fear for my medicines.' He looked up rather wildly. The wind was singing its mournful song in the rigging. Flora was pitiless.

'But have you cut up a woman's corpse?'

'Heavens, Flora, why would you want to know such a thing?'

'You have to learn about their insides, and their insides are different to a man's, aren't they?'

She looked at him, sly. It had, initially, been easy to make Dr Honey blush, but he was getting wise to her.

'I'm sure you know far more than you let on, Miss, and you are ragging me.'

'I'm not! I might be a doctor one day. I want to heal people. Without knowledge, you cannot heal the sick, can you? What do you think? Would I make a good doctor?'

As Honey opened his mouth to respond, there came a thudding outside the door, and the ship plunged into a deep trough.

'Fuckin' cunt!'

Flora made her face a blank. The door opened. A tall, loose-limbed sailor shuffled in, cradling his right arm, his face twisted with pain.

'Doctor, I . . .' He saw Flora and turned red. Flora recognised him as one of the Orkneymen, Ian Sellar.

'Miss Mackie is just going. Run along now, Flora.'

'Can't I help?'

Ian Sellar released his hand with a groan.

'Ach, Sellar, what happened here?'

'Thole pin. Shoulder.'

He pressed his lips together and closed his eyes. Honey sat him on his chair under the lamp, picked up a scalpel and sliced off his shirt in one sure movement. Flora, who had gaped when he picked up the scalpel – was he going to *amputate*? – hovered behind them.

Ian Sellar was one of the younger Orkneymen, and the most perfectly made man Flora had ever seen. Where most of the men from the north were craggy and reddened, his skin, uniquely on the pink, Pictish *Vega*, was the colour of honey. His features were strong and graceful; he moved with an ease that singled him out. Flora stared at his bare, golden back. She failed to understand how she hadn't noticed him before now. Honey tutted as he palpated the shoulder, where blood was spreading under the skin. Ian groaned.

'It's not dislocated, Sellar. Just badly bruised. You'll have to keep it

in a sling for a while. Flora, pass me that roll of bandage, there. No, there . . . If you want to make yourself useful, you can pour some witch hazel into that dish. It's the one in the . . .'

Flora hopped smartly to do as she was told. She was familiar with most of the contents of the sick bay. She passed Honey bandages and pins and compresses and brandy, nimble as a cat as the ship bucked under a mauling from angry waves. Ian's face was sickly under his tan; tiny drops of sweat rolled down his temples. Flora stood behind him, watching, and as the ship gave a mighty bound to starboard, she lurched towards him so that her hand brushed down the glistening, undamaged shoulder. In another moment, she snatched her hand away, stung by his heat. Honey himself had stumbled backwards, with a swallowed oath. Sellar sat with eyes tight shut. Neither seemed to notice that she had done it on purpose.

After that, Flora watched for Sellar's figure on deck, tuned her ear to his uncouth accent and became adept at picking out his voice through wooden walls. Men were never alone on board ship, apart from the few minutes they spent at the head, but even had he been alone, she would not have approached him. She could not imagine what she might say.

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In long twilights, father and daughter searched for Venus and Mars, Altair, Arcturus and Polaris. Sometimes they sat up through the whole brief night and followed the stars as they wheeled across the sky. They were circled by constellations that never set: the Bears, the Dragon, Perseus, Cassiopeia, Cepheus – none of them looking anything like what they were supposed to represent, except Draco the dragon.

'Why is the Plough called the Great Bear when it looks like a plough?'

'You're not seeing all of it. The plough is just the bear's back and tail.'

'Bears don't have tails. Not long ones.'

'Perhaps old Greek bears had long tails.'

Flora laughed derisively. Her father thought she was getting above herself.

'How do you know that Draco looks like a dragon, in any case?' he went on. 'Have you seen one?'

'I've seen pictures.'

'Do you think those pictures were drawn from life?'

'Of course not! They don't exist.'

'So perhaps Draco is no more like a dragon than Ursa Major is like a bear.'

'Yes, but . . . it can't be *unlike* something that doesn't exist because . . .' She stopped, on uncertain ground. 'There *are* bears. Why do they have to make something up? They could have called it the Snake. Snakes exist.'

'Are you asking me why people invented monsters?'

'I suppose so.'

'Perhaps because they had never been whaling. Look in Draco's tail – halfway between the bears. There is one brighter . . . the second-brightest star.'

She steadied his telescope on the yardarm. The ship was completely still, the sea like a pond. An iceberg hung, motionless, two hundred yards away, doubled in the mirror surface. The stars were doubled, multiplied, as though the *Vega* were suspended in dark space, stars under them, and infinite depth.

'Do you see? That is Thuban. Once upon a time, he was the Pole Star, when the Egyptians were building their pyramids. You remember the Egyptians?'

'Yes, I like the Egyptians. They had a god with a falcon's head.'

'They did. Whose name was . . . ?'

A fraction of a pause. 'Horus.'

'Yes. The Egyptians built their Great Pyramid so that Thuban shone down a shaft into the middle of the pyramid.'

Flora was disturbed.

'How could it be the Pole Star?'

'Five thousand years ago, Thuban was the Pole Star. And one day – far in the future – it will be the Pole Star again. And it will be more perfectly placed than Polaris. Why? Because the earth moves on its axis. Like a spinning top when it's going to fall over.' He demonstrated with his hand held vertically, waving it back and forth. 'Very, very slowly. Now, of course, Polaris is the Pole Star, or rather, it is closer to the celestial pole than anything else, but one day . . . Everything changes, Flora. No matter how good, or how bad, nothing lasts forever.' He moved the telescope up and fractionally to the left. 'Now look there.'

'I see Vega,' said Flora firmly, alarmed by the conversation's metaphysical turn.

'Good. One day, very many thousands of years in the future, she too will be a Pole Star. And a very bright and good Pole Star she will be, although not as well placed as Thuban. And when she is the Pole Star, summer will fall in December, and midwinter in June.'

When Flora got over this disturbing news, she decided that she liked Thuban – once and future lodestar. She liked things to be right; not nearly right, or good enough. Best of all, she liked Vega. She belonged to all of them on the ship, but especially, Flora felt, to her. When she found out – as she was shortly to do – that the Eskimos called Vega the Old Woman, she was violently, though secretly, offended.

*

The Atlantic swell disappeared, quelled by the increasing frequency of icebergs. The sun came out, and stayed around the clock, as if it couldn't bear to leave them. It conjured colours out of grey ice: green depths, royal-blue shadows, aquamarine hollows. The whole watery, deliquescent world glittered.

Flora spent hours hanging over the gunwale, staring at the ice. It was like watching a fire – you couldn't stop. There was a precision about ice that she felt as a new quality in her experience. Every piece

was different and particular, effortlessly beautiful.

A sight she was always to remember: a peculiarly fine berg, crested and crenellated like an Alpine peak, which rotated to reveal an arch of ice, seventy feet high. It glittered white, scored with clefts that glowed deep blue above and, at its water-worn foot, a pale, silky green. A ruined masterpiece from a vanished civilisation, it drew even the most ice-weary sailors to the rails.

The crow's nest called down: 'If Miss Mackie would care to come up, she will see something fine.'

Mackie sent Flora up ahead of him – it wasn't the first time she had been to the crow's nest on a calm day, but he made her tuck up her skirts and climbed the ratlines behind her, just in case. John Inkster hauled her up through the hole and she wriggled into the narrow space in front of him. He kept his arms loosely around her, to stop her from plunging the eighty feet to the deck below.

Above the arch, the top of the iceberg flattened into a small plateau. The sun's rays had begun to melt the ice, which formed a round pool the intense blue of a melted sapphire – and now, she could see, a little stream was carving a channel in the pool's white bank, a stream of milky blue that ran to the edge of the plateau and vanished over the other side. A blind, blue eye, weeping a single, endless tear.

'Well, Miss Flora,' said Inkster, his breath warming her ear. 'What do you think of our ice islands? Are they not fine?'

Flora found she could not speak. There were no words good enough. She turned full, gleaming eyes to Inkster, who laughed, but kindly. He thought it made her look almost bonny.

*

It was a good run, but at seventy-three degrees north, they hit the pack ice. Fog descended, blotting out the ice-choked coast of Baffin Land. Other ships in the fleet caught up: *Ravenscraig, Symmetry*, *Mariscal* and *Hope* . . . They threaded their way through the loose

pack to the North Water, where whales might lurk. A lookout conned the ship, peering into the murk, shouting himself hoarse. The fog smothered all sound other than the eerily slopping water and the masthead's cries.

'A fall! A fall!'

Flora was in the cabin. She crept on deck, keeping out of the way as men ran to the whaleboats hanging in the davits. She could feel the tension in the ship: running feet, bitten-off commands. She watched Ian Sellar spring into the first whaleboat, his face alive with excitement. The five men took their positions and the deck crew winched them down on to the water. They pushed off, and the boat steerer – the Dyker, David Latto – barked orders. The oarsmen swept them around in their own length and the boat shot off at a swift clip. Her father's hand landed on her shoulder.

'Flora,' he said warningly, 'when they come back with the fish, you get below. If I see you on deck after that, I will give you such a hiding.'

'When do I come out again?'

'When I say.'

'But what if . . .'

He gave her a look of such ferocity that she shut up. He had sworn to himself Flora would not witness the actual business of whaling. She thought she knew all about it. She thought she was prepared. In the end, the boat returned empty-handed, having lost the whale.

The following day, they had more luck: boats were lowered after two whales; one was brought back. Flora listened to the shouts as the carcass was brought alongside. The men were cock-a-hoop. She sat quietly and saw nothing, but heard everything, and smelt a stench worse than anything she had ever imagined. The reek of blood filled her nostrils, her mouth, her eyes. Another foul, chokingly awful smell – rich, ripe decay – made her retch. The men were working amidships, but she heard the drumming of feet and the laughter – louder and

wilder than the men's usual discourse, as though they were drunk on slaughter.

She heard the blades' slicing and chopping, the sawing of bone and the ripping – the endless ripping – of skin; a sloshing that she hoped was water, even as she felt it was blood. Seeing it couldn't have been any worse – this way, she imagined the knives plunging into flesh and fat, the blood swilling around the men's limbs, sleeving them in red. When at last her father came to release her from the cabin, she was sickened and mutinous. Seawater had been pumped over the decks to flush out the bloody sawdust. But the whale's despoiled carcass was still near, low in the water, violated by fish and gluttonous seabirds. Heaps of grey-pink blubber were on deck, as men pitchforked it down into the hold. Blood-streaked bone hung, drying, on the yardarms.

'I told you it's not a pretty business,' said her father. 'Do you understand why I don't want you to witness it?'

'I don't know how seeing it can be worse than hearing and smelling it,' she said. 'I just imagine it. And in the cabin I can't breathe.'

Her father – to his credit – took her opinion seriously. Subsequently, she was allowed a small area of freedom aft of the mizzen when the men were working, from where she could glimpse the bloody process, but not get under their feet. She appreciated the dangers – the deck became slick with blood and oil, and more than once she saw a man slip, and be cut by the wicked blades.

Chapter 2

Melville Bay, 76˚21'N, 71˚04'W
Winter 1883–4

The men called Flora their mascot – that season, the *Vega* butchered more whales than any other ship. In mid August, a gale jammed the ice into the bottleneck between Cape Alexander and Cape Isabella. The old *Symmetry* was caught fast. The other ships clustered round, ready to take on the crew if – when – she was crushed. The storm worsened – south-westerlies pushed the ships back into Melville Bay and piled an immense field of ice around them. Captain Mackie sat Flora down in the cabin to explain that they wouldn't be going home this year. To his surprise, she smiled.

Once he had found a floe to his liking – a thick sheet of ice the size of Barclay Park – he sent the crew out with twelve-foot saws. Flora watched as they carved out a slot that would be the *Vega*'s home for the winter. The days dwindled. At noon, the sun was so low that, if Flora stood at the rail, facing south, it hit her straight in the eyes.

She was elated. She felt she had lost her disadvantage – when a ship is in dock, sailors have no function either. She was allowed to roam where she liked, within sight of the ship. The purser made her a pair of pantaloons, and, with her hair stuffed under a woollen cap, she looked like any of the shorter sailors. When the ice dock was ready,

the *Vega* was warped into place, and new ice sealed her in. Visible to the west was *Symmetry*, locked in her icy cell.

Flora watched the sea change. First, it became a supple, gelatinous black paste, then a milky film crept over it. One morning, the ice pulled off one of its most seductive tricks: an eruption of crystal flowers; jagged white blooms were strewn across the dark ice as if there had been a frost wedding. Flora employed Robert and an oar to fish up some of the flowers and take them into her cabin, where she tried to draw them before they melted. Frustrated by failure, she cried.

The thickened water still heaved, like the flank of a breathing animal, but sluggishly. It congealed into porridge, which swallowed the flowers, then became big, grey pancakes that fused together, like armour plate. *Mare Concretum* – the concrete sea. She couldn't remember the sound of waves.

The *Vega* was no longer a ship riding on water, but a wooden cockleshell held in a medium that cracked and creaked and yelped. The pack ice could sound like a menagerie of animals in various states of distress: puppies whining peevishly, or bees swarming, or a whale groaning in agony. Or it was insensate and violent: cloth ripping, artillery fire, a grand piano falling from a second-storey window. There were sounds that resembled nothing else.

*

The day before her thirteenth birthday, when daylight was no more than a glow on the horizon, they had visitors. The lookout shouted – there were dark dots on the ice, coming closer. Flora watched with alarm. Eskimos. The men had talked about them, so she did not feel she had very much to fear, but by all accounts they were a small, strange, greasy, murmuring people. As they got closer, one of them shouted distinctly, '*Vega*! *Vega*! Mackie!' Flora was profoundly shocked. These people knew her father! She did not think she would like them.

Three Eskimos came aboard the *Vega* and were admitted to a

makeshift saloon on the deck, covered with canvas. Flora sat in the corner behind her father. A fire blazed in a bucket. Of the three figures, Flora could make out only one name, which was Kali. Kali was a man – he had a wispy beard and was extremely fond of tobacco. The other two had smooth faces and long black hair. One wore a pointed hat made of fur, turned skin-side out. None of them was taller than Flora. They gave the crew of the *Vega* dried pieces of something, which they chewed. One handed Flora a piece, murmuring at her. Flora sniffed it and tried tasting it. She had no idea what it was, but it was rank and hard, clearly inedible. She smiled politely. Captain Mackie handed out tobacco and produced lengths of red cloth and beads. There was smiling and talk from the Eskimos in their mumbled language, while her father smiled and spoke in English about the whales. The Eskimos nodded, but Flora did not see how they could understand each other. Before leaving, one of the Eskimos took Flora's shoulder and smiled, talking all the while. She smiled, and was worried in case she had committed herself to some dangerous undertaking.

'You knew them before!' Flora accused her father afterwards.

It was still an astonishing concept. While she was sitting in Crichton Street, he had entertained these people, and chewed their horrible food. She gathered now that it was the dried skin of a unicorn fish. At home, he had never spoken about this.

'We usually meet the huskies when we're here. They like to trade, so we bring tools and cloth. Iron goods are precious to them, as they have no metal. And timber. I met Kali before. He is a decent fellow, for a heathen. Apilah, I have also met, although not his wife, Simiak.'

'Which one was the wife?'

'The one in the hat. Only women wear the tall hats. It can be hard to tell otherwise, unless the men have beards. Most of them don't.'

Flora stored this information away.

'So they are friendly? They wouldn't hurt us?'

'Good heavens, no. They are not an aggressive people – they can hardly afford to be. They know we have guns. I think Apilah wants you to meet his children.'

'Why?'

'To play with, I imagine. I think you are of an age.'

'But I can't talk to them.'

'Come, Flora, it is just like meeting children in Dundee. It is up to you to show them good manners. Listen, I will teach you a few words.'

The next day, more Eskimos came back, with two children. Apilah introduced the children to Flora. Both were shorter than Flora, with long, greasy hair. Neither had hats, so she assumed they were boys. This was a lucky guess; girls did not, she later discovered, wear the hats until they were married.

One of the boys was called Tateraq. He was sturdily built, had a round, smiling face and held himself with confidence. The other boy was Aniguin. He was perhaps Apilah's son, perhaps not; Mackie wasn't sure. He was slighter than Tateraq, and clearly, from their mannerisms, his inferior. He smiled a lot, but sometimes looked fearful, sometimes flinched.

They took Flora off with them. They had brought a sled and two dogs, which they treated with casual cruelty. The boys built snow targets and practised throwing their harpoons. They let Flora try – or rather Aniguin, at Tateraq's command, let Flora try with his harpoon. Almost everything she did, whether clumsy or deft, produced laughter. She smiled dutifully at first, determined not to lose face, but was soon laughing with them. She had the feeling that it was not mocking; the laughter was just there, like the snow.

From November to February, it was dark. A grey light emanated from the ice as much as from the sky, sometimes tinged with blue, or rose,

or violet. Flora got confused about time. She fell asleep in the middle of the day, was wide awake at night.

Strange, dreamlike things happened in this twilight. One day, she went with Tateraq and Aniguin to a place under the cliffs. It was clear, and a green aurora sizzled above them. She gaped at the writhing lights, but the boys didn't seem interested. She supposed they were as ordinary to them as rain was to her: not worthy of notice. The boys stuck hands in their trousers and, pulling out their penises, started to agitate them hard. Flora stared, open mouthed, as Aniguin laughed, and seemed to be exhorting her to join in. Appalled, she turned and ran.

Afterwards, she stayed in the cabin for days, complaining of a stomach ache. Since she was rarely ill, Captain Mackie asked Dr Honey to see her.

She hadn't seen much of Honey this winter. Darkness did not agree with him. He did not take advantage of the sailors' winter pastimes: football, hunting, music, social calls. A lot of the men had friends on the other ships, but Honey held himself apart. Flora, not ill in the least, felt guilty.

'I feel better now,' she announced. 'I think it was something I ate.'

Honey grimaced.

'Yes, the food on board is somewhat indigestible. Hardly suitable for young ladies. And the constant darkness is not suitable for anyone. But describe your symptoms to me. Your father said you were suffering from stomach pains. Has there been any vomiting?'

'Um . . . no.'

'And what about . . . ?' He blushed, not meeting Flora's eye. 'How are your bowel movements? Do you know what I mean by that?'

'Yes. Um . . . all right.'

'So what sort of pain is it?'

'I don't know – just a pain.'

'Your father did not say . . . whether . . . er, do you, er . . . have your monthly courses yet?'

He stared at the wall above her head.

'No!' said Flora, revolted to the depths of her being. Moira had warned her that this disgusting thing lay in wait for her, but she had chosen to forget it.

'It could be that it is about to begin – that would cause stomach pains.'

'Oh.' She wished he would go away.

'Or . . . it is just possible that it might be appendicitis. I need to make sure. If you would lift your jacket . . .'

'It doesn't hurt now.'

'I will be able to feel if the appendix is inflamed. It could be dangerous.'

Flora found herself lying back, lifting her jacket and tugging the various layers out of her waistband.

'I'm sorry if my hand is cold,' he said, and put his hand – damp, clammy – on her stomach and pressed down. She tried not to recoil.

'Does that hurt?'

She shook her head. He moved his fingers around, pressing her flesh. She felt that she was being punished. He was looking at her face, more or less.

'And here? Does that hurt?'

Flora nodded. 'A bit. It's much better than it was.'

'Let me just . . .'

He pushed his hand further down towards the space between her legs, pressing and probing. His breathing changed. His fingers were now on the bony mound between her legs, and her heart quickened. She felt strange.

Without looking, Honey said gently, 'How is that?' His fingers probed further.

Suddenly, roughly, Flora pushed him away, wriggling herself upright in the same movement. Her hand went, without conscious intent, to the knife hanging round her neck; she pulled it out and held it in front of her face.

Honey jerked back, eyes wide. Flora realised that the blade was still folded into the handle, and cursed herself. But her face was murderous enough.

After a second, he attempted a laugh.

'This is perfectly normal, Flora! This is what doctors do. We have to examine our patients if we are to find out what ails them. Down there is where the appendix is located. Did I hurt you?'

She looked down. He tried to laugh again, but didn't, quite.

'Well, it doesn't seem to be the appendix. Put that . . . weapon away, like a good girl. I am sure it was something you ate, and no wonder. Perhaps you should avoid the pemmican for a few days; it really is vile stuff. Although seal meat is no better.'

Flora covered herself and pulled up her knees as a barrier between them. Her heart was hammering and her face was hot. Honey's face was flushed too, though whether with shame or anger, she had no idea.

'You understand, Flora? I was carrying out a perfectly normal examination. Heavens, you're a child! You cannot think . . .'

He drew back, shaking his head at the very idea.

'Flora, say that you understand what I'm saying.'

'I understand,' she mumbled.

'We're friends, are we not?'

She nodded, ashamed of herself. What was wrong with her that she reacted in this silly way to poor, harmless Dr Honey?

'Well then . . . No harm done?'

She nodded, and muttered, 'I'm sorry.'

Honey laughed, relieved. 'At least the blade was sheathed!'

Flora laughed too, hating herself.

'So – ha, ha – when you speak to your father, you won't tell him . . . ?'

If he hadn't said that, Flora would ever afterwards have believed she was in the wrong. But again that knell of alarm struck her, and she knew that he was begging, that he felt ashamed.

'No, of course not,' she said.

Her face was a stone. She was ashamed too; it was her fault, clearly. She was bad, to make him do that. Could he tell that she had liked it?

Late that night, a storm blew up. Flora brooded in her bunk. No one had previously made her feel her femininity as such a burden and a curse. She felt betrayed, but the person she was most angry with was herself. She must have behaved with Honey in such a way as to invite what he did. And the boys . . . She unfolded her knife and pressed the tip against the skin of her inner arm. A bead of blood appeared, fascinating and frightening her.

Winds battered them from the north; the temperature dropped until the ice cracked like pistols and rang like bells. The wind howled up and down the scale; the frozen rigging clattered; ice fell to the deck with a musical clinking and susurration; the timbers creaked; the ice growled, and groaned, and screeched. The sailors were kept busy hammering ice off the timbers and rigging, but just as quickly it built up again; every morning the ship was encrusted; it threatened to engulf them. The rest of the time they joked and sang, and, sometimes, prayed. It did not occur to Flora to be afraid. She was with her father, the great Captain Mackie, in the *Vega*, the finest ship out of Dundee, or anywhere. When the storm blew itself out and the moon shone for the first time in days, everything was softened and blurred with snowdrift. It was peaceful, but the *Symmetry* had gone.

Flora had to wait several hours before the search parties returned. Not a single member of the *Symmetry*'s crew had been lost. The slowness of the ship's destruction meant they had been able to abandon ship and take most of their belongings with them. The crew was split among the remaining ships; eight came to the *Vega*.

It lightened the atmosphere to have fresh blood. Petty quarrels were forgotten. Dr Honey was kept busy with frostbites and crush injuries. Flora spent more time with Robert Avas, or reading. Captain Mackie made a visit to the Eskimo village and stayed away for two nights.