roundelay. The times are changing, there's no doubt, the old giving way to the new, things seeming to have accelerated since the end of the war. Born in 1910, he's in his mid-forties now, as the South Western Stone Company give a trial run to the biggest circular saw in the world. It's 11 feet by 71/2 inches, with a cutting edge of 300 rectangular sockets, which hold 270 diamonds as well as 30 clusters of smaller diamonds. The saw operates at the equivalent of 120 mph and can cut through a block of Portland stone 4 foot thick in under 10 minutes, something which would normally take 10 hours by frame sawing. He's amazed at the noise these big saws make, how they can run day and night; he supposes this is the only way they can pay for themselves. Then there's the introduction of smaller saws that can cut with unerring precision. So clean, concise and so straight, they can even cut at angles. It's a revolution of a kind, as ancient skills become redundant. The company say, 'No-one will be put out of work, as the men will be absorbed into other essential work here.' But still Skylark wonders how these newfangled machines might usurp the old crafts. How long before there is no more back-breaking, sinew straining work some 60 feet down in the ground, where even now he can hear the clink of the hammers as they drive metal spikes into the stone?

He was born within sight of these quarries and the sea. He played here as a child, amidst the piles of stones and below the cliffs, walked where he wanted. There were no fences then. Quarrymen at work, stout fellows, some as big as Charles Atlas, working in pairs to split the rock along the seam, taking turns to drive in the wedges with heavy sledgehammers, keeping time with a chant or a singsong. He still relishes this sense of freedom, to wander the Isle, even when it's cold and bleak, shrouded in mist. It's then that the muse hits him and he wants to write poetry. He sits down, strikes a match, lights a fag, watches the sea and all its moods, writes a note: 'loveliness on the morning tide, cheerful and endless.'

As an apprentice stonemason, he learned how to interpret the drawings on paper with the skill in his hands. He says the stones have always talked to him. Alongside him were 70 masons, who sang to the beat of the hammer and the mallet. As he worked to embellish the rock, he whistled all the time; then his foreman said, 'We've got a bloody Skylark here.' The name sticks.

## Old habits die-hard, all that is left sometimes is a memory

As the 1950s begin Janet Cartwright is 8 years old. The King is still on the stamps as she writes to her father Frank. Her letters describe her day-to-day doings, the Brownies, schoolwork, losing her milk teeth, passing her exams. Before she can shape words, she draws him pictures. They are still using ration books in Smethwick, so when he returns from his engineering duties he brings a box of fresh groceries from his lighthouse allowance – and jam. She has never seen such a large jar of jam. Sometimes he is away for months on end. A letter takes more than a week to get there, a week to get back. He is all over the place. He's was once out in the West Indies, where he was caught in a hurricane and lucky to get home again.

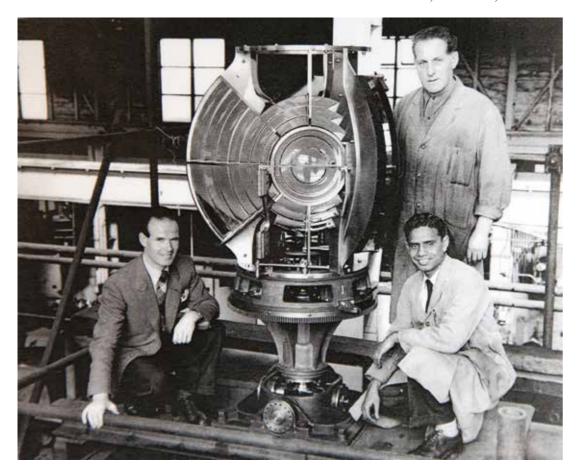
He's been to the Middle East, Kish Bank and Skerryvore in the Irish Sea, to the Hebrides, Orkneys and Shetlands, John O'Groats, Mallair Harbour, Beachy Head, the Needles, St. David's Head. He tells her about driving out to a lighthouse in the middle of nowhere when the driver suddenly stops, gets out and kneels on a mat for his prayers. You don't see that every day. On that job, he has to make his own knife and fork, as they eat with their hands in those parts. And there's no machinery, they have to pull the stuff up with a rope. He says the land lights are the easy ones to service, though one winter he is working at Dunnet Head in Scotland when he falls down the steps and ends up in hospital for Hogmanay.

Birthday cards arrive from exotic locations, India, Gibraltar. There's no telephone, no email, only paper, stamps and envelopes. She asks him to send as many stamps as possible, so she can split them amongst her friends. They do well collecting stamps; often they fill the surface of the envelopes which hold the precious correspondence to her mother Beatrice and herself. When he's at home, they go on holiday to Torquay, Blackpool, Weston, by coach and train. Truth is, he doesn't really want to be away once he's come back to Topsham Road.

One morning, before she leaves for Holly Lodge school, he tells her he will be testing the foghorns in the afternoon and to listen out for it. When it goes off, she jumps up and shouts, 'That's me Dad!' Nobody else is prepared for it. They are making cookery aprons. It's a huge noise. It stops and then goes again. The teacher gives her a look then explains to the class how the machine that makes that special noise will be fixed on a lighthouse that will be out in the sea, a matter of life or death to the seafarer. Some people at the works call it 'The Grunt.' A few days before testing a new foghorn at

Chances, Barbara Adams, who works in the despatch office at the lighthouse works, is sent out with a couple of other girls into the immediate residential area around the factory perimeter to deliver notices to local households which tells them when the fog horn is to be tested. They also offer to give out sets of earplugs.

There are two different types of horns they test. The bigger of the two is a vertical resonator with the mushroom top, which is supplied to light-vessels and rock islands where an all-round sound is required. The other type is a curved resonator with a jointed trumpet, more akin to a conventional horn; the upper section can be turned downwind when necessary. Each foghorn has its own signature voice – the one at Portland Bill blasts every 30 seconds for  $3\frac{1}{2}$  seconds, a type F diaphone, a powerful low frequency tone that can be heard up to ten miles away. Holly Lodge school is only a mile away from the glassworks, so 'The Grunt' provides an astonishing bellow. Janet will later visit some of the locations her father worked – Portland Bill, Corbiere,



Europa Point. She takes the letters to show the keepers. Some do remember him, this meticulous lighthouse engineer and they tell her of his joy when he received one of her letters, postmarked Smethwick, home of the light. She never visits the interior of the Chances factory itself, but she attends children's parties at the Recreation Ground.

The glassworks are slowly adapting back to a peacetime economy. Lighthouse work virtually ceased during the war years, the factory using its expertise to produce searchlights, predictors, sound locators, radar equipment, gun pedestals, reflector floodlights, aerial beacons and buoy lenses. In 1945 Pilkington Brothers of St Helens, for so long a rival glass company, acquire a 50% holding in the company; by 1951 Chance Brothers become a wholly owned subsidiary of Pilkington. The south side of the works are now being modernised, with new products introduced, such as soda lime tubing for fluorescent lights, cathode ray tubes for televisions and radar installations. Sir Hugh Chance, the Chairman, notes that, rather like in the late 30s, rearmament offers new fields of activity, contracts to supply searchlights, mobile floodlighting sets for aerodromes and stand-by generating sets. Another project now being fully developed by the Lighthouse Department is the manufacture of the Sumo Submersible pump.

The BBC Industrial Correspondent, Bertrand Mycock, visits the factory for a broadcast, commenting on its distance from the sea, then stating: 'If you want a lighthouse anywhere in the world, the people of Smethwick will not only make the light, but will plan the tower, tell you where it should stand, and, if you like, will even arrange to build it. But this factory in Smethwick makes other things besides lighthouses. It makes the lenses for car headlamps and railway signals; it gives eyes to the tank driver, the gunner, and the airman. It makes lights for streets and public buildings; it makes tumblers and fruit bowls and test tubes. It made, 100 years ago, a million square feet of glass to the Crystal Palace. It gave Big Ben his shining clock face.'

He notices the little communities of men and woman, each working around their own furnace or workshop, the Black Country bonhomie. He finds the mix of old and new fascinating; some people talk of electronics and radar, alongside those whose craft owes its lineage to the Roman occupation, though he might be left baffled by some of the local dialect:

Moach — to idle about Myther — to bother, irritate Nogman — ignoramus Blaberen – to talk idly (i.e. 'What's her blaberen about?')

Codge – to patch up in an untidy manner (i.e. 'It's a codged job.')

They tell him, half-jokingly, that the factory is basically run by five families. Many of the skills have been handed down the generations, working with some machinery for grinding and polishing that has been running for nearly a century. He watches as a man with a long blowpipe strides up to the furnace, thrusts in the rod, twists it a few times, draws out a blob a glass – 'glowing a milky pink in the gloom.' Swinging it as he goes, giving it a few puffs to expand it, he walks quickly to a pit and lowers it, as an operator below closes a mould around it, then 'the mould is opened and out comes the perfect shape – red now, and yet sparkling...' (He doesn't mention that Chances have provided all the glass globes for Piccadilly Circus.)

He likens the rolling of glass to biscuit making, the flow of molten glass, rolled and patterned, going through ovens whose job is to cool it slowly, then a man cracking it into sheets with a diamond, throwing away the waste pieces with a tremendous crash, a man with a broom handle breaking it up into smaller pieces, those to be reused. Ray Drury, an apprentice draughtsman at this time, describes the rolling machine to be like a massive wringer with all sorts of complications built in. 'The bottom roller had the pattern on and the top roller was smooth,' he says. 'The glass came out of the furnace with the consistency of treacle and went between the rolls. It could not be touched or it would mark so it was supported on a cushion of air until it had set and then it was onto asbestos rolls to travel through an annealing lehr. Out the open it was cooled and then cut and carried off.'

Mycock observes as two men build the gunmetal frame of the optic for a lighthouse bound for Ceylon, which will hold scores of prisms and reflectors to gather up the light and throw it out in a straight and powerful beam. Each must be set at just the right angle. It's a painstaking process that will last three months. He spots a huge piece of optical glass on the floor, like 'an enormous uncut diamond, picking up the light from an open door, and sparkling and flashing, although it was dull and foggy outside.' Ernie Barratt, one of those men, is soon off to Columbo, to spend another four months installing the equipment at Galbokka Point, replacing the old Clock Tower (whose light is now obscured by city buildings). At 95 feet tall, the new light is one third the size and weight of the old tower lamp but is far more powerful. It does not require mercury and, as it works electrically, it only needs one man on watch. Around its concrete base are placed four statues of lions. Meanwhile, N.T. Dalton and M.C. Hitchcox have installed

