

To own the Sky

By Adrian Tchaikovsky

Between the years of 470 and 482, a little over fifty years before either Stenwold Maker or the Wasp Empire came to trouble Collegium, a curious contest was sponsored biannually by the artificers of the Great College itself. The challenge, extended to all comers (although in practice almost every entrant was local), was to find the heaviest self-powered flying machine.

The entrants, student engineers, professional mechanics and armchair artificers, gathered atop the cliffs east of the city, each cradling or towing his or her creation: little orthopters of a hundred different designs would be cast over the edge, to their sooner-or-later-but-certain doom, lost to the sea. College staff would be standing by, with clock and glass, to measure out the seconds, or sometimes the minutes, of each entry. The weights and the times would go into the department's books as a curio for future generations. The formal name for the challenge was the Aviation Department All-Comers Rally, but it became known in common parlance as Clifftops.

In the year 478 a maverick artificer named Cutmold Limner caused a considerable stir amongst the academics and the artificers of Collegium by turning up at the cliff edge with his *Mayfly*. It was, by some large margin, the heaviest device ever to be presented at Clifftops. Moreover, when Limner himself climbed in, it was heavier still.

The stewards of the rally were still in frantic discussion over whether such a dangerous enterprise should be allowed when Limner bid his apprentice to set the clockwork motor going. The *Mayfly* rumbled forwards, to the mingled delight, alarm and derision of the onlookers and, as it passed over the lip of the cliff, Limner threw a lever that set the wings ablur. For a moment they beat the air fiercely, and several onlookers record in their diaries that the machine seemed to rise up from the cliff's edge, hanging impossibly in the air like a living thing.

Then there was the unmistakable sound of an overstressed gear-train jumping, teeth parting company with teeth, and the vessel tilted madly in the air. Limner gesticulated wildly, his voice lost to the wind, and shortly thereafter, the sea. The *Mayfly* was well named, his detractors jeered later, or perhaps poorly named, for there was no *may* about it. It had not, and that was that.

The name of Cutmold Limner's apprentice was Lial Morless, and this is his story.

The workshop was empty. Oh, the tools, the piecework, the odds and scraps were all still there - who would bother to take them? - but Cutmold Limner would never return to it, and so it was empty.

Lial Morless slumped onto a stool. He felt a yawning chasm within him, as though he was falling, not that steep plunge into the unforgiving sea that Limner had taken, but falling forever, no end in sight. The diminutive forge-hand, Scop, lurked in the room's furthest reaches, a broom in his hands. He had not come to watch the Clifftops. He had said all along it would not work. He was just a forge-hand without a College education, and nobody had listened to him.

The walls of the workshop were covered with tacked-on plans: the cross-sections of wings, the corrugated backs of gear trains, skeletal sketches of the fallen flier's wood-and-canvas hull. Lial stared at them dully. *Another two years. Would that have been so hard a wait?* But for Cutmold it had seemed so. Lial's master had not been young, and he had been so *sure* of his calculations. Sure enough to cast himself off over the sea without a test flight.

Scop made a fierce spitting noise, and a moment later a bulky form blocked the sunlight from the open doorway. "My condolences, of course." A broad Beetle man in formal robes ducked in. Lial knew him well and liked him not at all. He had been a patron of old Limner's once, and later a vocal opponent: Goiter Parrymill was his name: the airship magnate. He had been keeping a narrow eye on Limner's work for a long time, had spoken against him at the Assembly, had turned potential funders and friends against him. Lial looked up at him with a baleful expression.

"No need for that, lad," said Parrymill cordially. "You can't say I didn't do everything in my power to stop this happening."

Which was true, Lial supposed, from a certain standpoint. In the background Scop made a rude noise and restarted his sweeping with undue aggression, but both Beetles ignored him.

"What do you want, Master Parrymill?" Lial asked, feeling abruptly tired and wretched.

"When you're over the worst of your grief, think what you want to do with the rest of your life, lad," the magnate said, a scum of sincerity floating over the patronising tones. "Come find me, if you want. Limner always said you were a promising lad as an artificer."

Lial stood slowly. "Firstly, Master Parrymill, I am twenty-six years of age, and so don't 'lad' me, if you please. Secondly, I'll manage just fine."

"And the rent on the workshop? You have the wherewithal? Only, I know the landlord, and Limner made him scabble for the money while the old boy was still alive." Parrymill raised his eyebrows as if in surprise at the wickedness of the world. "Alone, without commission or income, you're like to struggle."

"Good. I like struggling. Lets me know I'm still alive," Lial said flatly. It was a sentiment from some Mantis tragedy, he belatedly recalled. The plot had not ended well for the speaker.

"You know best, I'm sure," Goiter Parrymill said smoothly, and took his leave, strolling off down the street with his robes gusting behind him.

Scop stomped forwards, clutching the broom like a spear, all righteous indignation now the man had gone. His head just about came to Lial's chest: the halfbreed result of some unlikely union of Fly and Beetle parents, neither of whom had stayed around to see what their child would grow into. Formal schooling was out of the reach of a man of Scop's lineage, but he had been around artificers and their tools all his life, and made up in practicalities what he lacked in theory.

"Fat, gloating bastard," the forge-hand said. "So, what now, eh? He's right about the rent. My wages too, no doubt."

Lial opened his mouth to offer some consolation, but Scop shrugged it off. "Never mind me. I can get work anywhere. Better paying, probably. I wasn't sticking here for the money." He looked at Lial fiercely, as though expecting the Beetle to bridle at that. "You?"

"I've got two years," said Lial, flatly.

Scop stared at him, the meaning sinking in. "Master Morless, if you want to go the same way as Master Limner, the cliffs are there any day of the year. No need to wait 'til the next Clifftops."

"It should have flown. I checked the calculations myself."

"I *said* it wouldn't--"

"You?" Lial rounded on the little man. "What do you know about it?"

Scop put his hands on his hips, facing off Lial's greater size without flinching. "Limner couldn't fly. You can't fly. Me? I can fly, and that cursed *Mayfly* was never going to get off the ground, and a nutshell for your calculations. Too heavy. Body too heavy for the engine, wings

too heavy for the joints. I *told* him.” The halfbreed put down the broom and hooked a satchel from beneath the workbench.

Lial blinked in surprise and Scop nodded. “What? I knew only one of you’d be coming back. I’ve got work to find, to put bread on the table. Goodbye, Master Morless, and good luck.”

“Lial,” Lial said automatically. He had never got on with Scop, particularly, but seeing him in the doorway, pack over his shoulder, putting Limner’s life and death behind him, the Beetle felt sorry to see him go.

Scop nodded soberly. In those days a halfbreed had to go a long way to be on first name terms with a College man. “You’re really going to carry on the work?”

Lial nodded. In his mind there was very little else. When Limner had gone over the cliff, seven years of Lial’s life had gone with him.

The halfbreed made a noncommittal noise. “We’ll see,” was all he said, and then he was gone.

After that Lial needed a drink and, rather than sit in the workshop – which he knew perfectly well he would not be able to keep up – and turn gradually more inward with each bowl he drained, he decided to seek out his mentor and instead get spectacularly drunk with *her*.

She was nobody’s idea of a good mentor, was Tallway. Lial didn’t know how many other students she actually had. Certainly she made more of a living telling unlikely stories around the tavernas than she did actually teaching. She claimed to be an Art tutor of high repute where she came from, and when she had first arrived in Collegium she had attracted a great many impressionable people who were led on by her exotic nature. It didn’t take them long to work out she was a sot.

Tallway was actually Taul We, but Collegium folk had little tolerance for trick names. She was the only individual of her kinden in the city, which seemed to suit her just fine. Freakishly tall, six foot four inches at the least, and angular every which way, she had a long, narrow face and sallow, unhealthy-looking skin. Her long, dark hair was tied messily back out of her eyes, usually with nothing fancier than a piece of string, accentuating her hollow eyes and hollow cheeks and a high, bony forehead. She stitched Beetle cast-offs into long coats and voluminous shirts and breeches cut to fit her gangling frame, which left her seeming always as if she had dressed in a hurry.

She was Grasshopper-kindens from the Commonweal, she said. Nobody disputed it, but then nobody could prove it, either. The Commoweal was not a welcoming place, and those Collegium merchants who had ventured the trip had come back, if they came back at all, chastised and empty-handed. A recent airship envoy from Goiter Parrymill’s cartel had been met with an armed warning and turned back at the highland border. The only commodity to come out of the Commonweal, it seemed, was Tallway.

Lial had originally stayed as her student for one reason only: flight. Beetle-kindens could sometimes develop the flying Art but, unlike most other insect-kindens, it did not come easily or naturally to them, and it had so far eluded Lial. One of the few pieces of information he had got out of Tallway was that her kindens were the same: they could fly, indeed she could fly, but it was a rare and difficult Art amongst them. That qualified her as a teacher, for none of the Beetle mentors in the city professed to have mastered the Art themselves.

So far his studies had born little fruit, and indeed with Tallway as a teacher it was hardly surprising. Half the time she was absent when he came for his lessons, and half the rest of the time she was already reeling drunk before he arrived. Whatever had driven her from her far-away home, it was soluble in strong spirits. Still, a drunken Tallway was at least entertaining, as her

normal talent for spinning fictions grew grander and grander the more she took on board, until she would swear that she was the world's greatest magician, the King of Sarn and the inventor of the double-reaction water-pump all at the same time. Despite his studies not progressing, Lial had grown fond of her. With Limner gone she was one of the few people he felt he could actually talk to.

In Collegium they drank wine, mostly from the local vinyards, and almost always watered. Drinking unwatered wine was for madmen and Mantids. And Tallway, when she deigned to drink anything so commonplace as wine. She was an expert in locating brands of alcohol that were as potent as they were obscure.

The stuff she foisted on Lial after Limner died was bitter on the tongue, sweet on the back of the throat and apparently some kind of nettle brandy. Where Tallway had got hold of a case of it, she wouldn't say, but they got through a remarkable quantity, with Lial brooding evermore deeply, and Tallway becoming increasingly erratic. Some time after midnight she explained to him, in great and complex detail, how she was going to go home and show "him" just how wrong he'd been, to "knock down all his people" and to "puncture his drum", whatever that meant. Lial did not try to ford the rushing torrent of her words lest he be swept away. Besides, almost everything that Tallway said was a lie, usually an obvious and entertaining one. He had no wish to find out whether the little truth left in her was all that remained after sufficient drink.

And in the small hours she looked him straight in one eye or the other and said, "So, you can't fly yet then."

"Not even the slightest bit," Lial confirmed, clinking the rim of his bowl to hers.

"Shows what a rotten teacher I am, though," she told him, slurringly earnest. "Never believe anyone who tells you they know how the Art works. Nobody does, not my lot, not your lot, not a bit of it."

"What do I pay you for, then?" Lial had been meditating under Tallway's guidance for over a year.

"This stuff costs something rotten," she explained, refilling their bowls messily. "So, you can't fly, not even with this expensive liquor inside you."

For a moment he thought, befuddled, that this was the secret, and he reached for the wings that were waiting for him in the ether, the unseen place that the Art came from, but there was nothing, and instead of leaping into the air he fell over sideways, which seemed hilarious to both of them.

"Not me," he confirmed to the floorboards.

"And your man Limner, old Cutmold Limner, he couldn't fly either," she said sadly. He cocked an eye up at her.

"It should have worked. No reason, no reason for it not to've," he told her. Long arms reached out and righted him, or tried to, and for a moment they were clinging to each other, getting tangled up with just which arm belonged to who, and she planted a nettle-flavoured kiss on his cheek. He leant into her bony armpit. "I heard the engine, though," he explained, gesturing wildly. "It was working. The wings, oh the wings were going all over the place, but then... the gears sheared. We made them strong as we could, but I heard all the teeth go on one of them, ping, ping, ping! Big old gears, but not strong enough, not for those wings. Why not? Why not fly? All the calculations worked. Master Limner had me check'em myself."

“Nothing that big can fly,” Tallway pronounced, hugging him to her one-armed, the other reaching for the bottle. “Sorry. I sorry. I sorry? Yes, I sorry, old Beetle old boy, but I say you before. Too big piece of metal belong earth, not sky, don’tcherknow?”

“I’ve seen bigger insects than that get off the ground,” Lial muttered stubbornly. “I saw a load-beetle twice that size get airborne. Landed on a roof and went straight through it.”

Tallway snickered. “No, but no, but your beetle, your beetle of whatever shape or size or what have you, you see, isn’t metal. Not wood. Not *weighing*, see? Not that I know how your gears and teeth or what have you, but metal... metal belong earth not sky. Us also.”

“Then I’ll build it out of...” Lial frowned and slurped the last drops out of his bowl, “something that belongs sky. What belongs sky?”

“Clouds,” she said, and “wind,” he countered, and they continued naming the lightest, airiest things they could think of until dawn (itself named two hours before) marched from the east like a harsh and unforgiving army.

Lial slept for most of the rest of the day, and retained only two things from the entire night’s work. One was a hangover of grandiose proportions, and the other was one of Tallway’s suggestions for something that belonged to the sky.

Staring at the ceiling of his lodgings, knowing that the workshop was lost, his master was lost, and the entire dream was on the very point of following them, he determined that he would give it a go. What could go wrong? Or at least, what else was left, that had not already gone as wrong as could be?

He let the workshop go. He would not need one until he had fixed a great many other things, and there was no point frittering his meagre savings on it. He sold every piece of machinery in it, kept the pick of the portable tools, and let the landlord reclaim the barren room. So much for that.

That done, he began to make enquiries into supply. The commodity that Tallway had dreamt up was neither readily available nor cheap. The local stuff was legendarily poor in quality and, while the Spiderlands shipped tons of it, they charged the earth, and demand was high enough to keep prices rising in all seasons. A little came south from the Moth-kinde of Dorax, but that was through Sarn, adding both tariffs and considerable personal danger for any trader willing to risk that route. Dealing with Ant-kinde was always a dubious business, with arbitrary confiscation, imprisonment or slavery always a possibility.

After a couple of months of asking questions and trying to arrange deals, Lial began to recognise that more than simple economics were against him. Merchants saw him coming, and closed their doors. Word of his intentions preceded him, with universally negative results. For a long time he could not account for it, but then Goiter Parrymill paid him another visit.

“I was sad to hear that you’d let old Limner’s workshop go,” the magnate rumbled. “You’re doing all right for yourself, of course?” He looked around the mould-stained walls of Lial’s wretched little room, where he had turned up unannounced.

“I live,” Lial told him flatly.

“And retain your ambitions, no doubt.” A sharp look came into Parrymill’s eye. “My friends tell me you’re enquiring into the silk trade. Buying. That rang a few warning bells.”

Lial sat on his sagging bed and waited, without comment.

“If you’re trying to mark out a space in the airship business, lad, it isn’t that easy,” Parrymill said, and his avuncular jolliness was gone. “I know, I know, everyone looks up and sees the gasbags, and thinks, *that’s a decent line of work, licence to mint money, I want a piece*

of that. But it's not that easy,,lad, and for those of us who have put in all the hard work, we don't appreciate new and inexperienced hands trying to undercut us. You're not the first young artificer to think we'll share ownership of the sky."

"So that's it," Lial said aloud. It was true, the airship trade did very well. It was the safest way to travel, the swiftest, and the bigger airships could even haul a fair weight in cargo. Over the last few decades the men who built and operated the airships had become a commercial aristocracy in Collegium, counting College Masters and Assemblers amongst their ranks.

"If you want work in the airship line, lad, there are easier ways than trying to piece together your own float and set up as a sole trader. Just ask. I'll find a place for you. For Limner's sake. He always reckoned you were a good hand." Parrymill served up his most beneficent smile.

Lial smiled back a little, and Parrymill obviously took that as an encouraging sign, but the younger Beetle shook his head.

"You needn't fear, Master Parrymill, I want none of the airship trade."

The magnate frowned. "Then why such an interest in the price of silk?"

"Because it's so very, very light," Lial told him. "Now, if you would be so kind, Master, I have an early morning in the markets."

Parrymill was actually almost through the door before he abruptly turned and stared at Lial. "You wouldn't be about the same lunacy as your master, would you?"

Lial just looked at him, pointedly waiting for him to leave.

"I don't see why I should let a gifted apprentice get himself killed by such stupidity," Parrymill snarled. "Boy, I will make it my business to ensure that you're in no position..."

"Goodbye, Master Parrymill," said Lial firmly, and closed the door on him. *Still*, he considered, *how very insistent. Why would Goiter Parrymill be so concerned by this?*

Does he see now what the river barge men saw, when the first airship put out and stole their trade?

And yet the doors were closed against him. The airship cartels were the city's greatest consumers of silk, and no merchant wanted to get on the wrong side of them. Lial descended the trading hierarchy rung by rung. From the big trading houses he went to known independent dealers, then to generalist merchants who sometimes saw a little silk in their business, and then to those whose stock in trade came to them after unexpectedly parting company with its rightful owner, and still nobody would sell him the quantity of silk he required. He was making ends meet doing piecework and tinker-work around the city, saving every silver standard and ceramic bit, but no matter how much he offered, the material was not to be had.

And then, after one more dismal evening of being given the brush-off even by smugglers and fences, a Fly-kindén messenger turned up with a note, written out in blockily neat letters

Hear it's Silk now you're after. I met a Fellow has some, he says. Find the Roach's Roost on Partwell Street near the river. Party name of Terant. Looks Horrible. Probably is. Good Luck.

There was no signature, but Lial felt he had nothing to lose, by then.

The river trade had been getting steadily poorer since Parrymill's peers had brought their airships to bear on the shipping of goods, and so he had hoped for some sympathy. The *Roach's Roost* was a sagging and dilapidated hostelry that had once served the barge trade up towards Sarn. Lial took a table, and had fended off three whores and a drunken Beetle with a knife before a big man

dropped easily into a seat across from him and Lial suddenly reconsidered just how capable he might be of looking after himself.

The big man was a Spider-kind, but like no Spider Lial had ever seen. He was heavy-jawed, broad-shouldered, shockingly hairy: his arms, chest and shoulders were virtually pelted with the stuff, and a coarse, dark mane was tied back from his unshaven face. He wore nothing but a coarse cloak and a kind of leather harness, from which a knotted cudgel dangled.

"You're the naïf who's trying to become a silk merchant," the big man observed.

"And you're Terant? I just need a quantity of silk, not even so very much. It's not too much to ask." Lial had his hands on the table-edge, ready to throw it up in the man's face if he needed to. He wasn't sure it would do any good. The man looked strong enough to break Lial and the table in half in one go.

"We have silk. Some," the big man said. "Your people won't trade with you, yes? Ours won't trade with us. We'll work well together. We'll make everyone hate us."

"Who's 'we'?" Lial asked, but his heart was pounding. At that point he couldn't care less who this man represented.

"Follow," said the big man, standing. He towered a full head over Lial, who was not short for a Beetle-kind.

To a private house in a poor district, Lial was led, and by that time his initial enthusiasm had begun to wear off. He kept a hand to his knife-hilt and tried to reassure himself by considering that, had the big man wanted to do him harm, then precious little could have prevented it already, they were so very mismatched. This proved less reassurance with every step he took.

Then the man was pushing open a door in a tall, narrow house of very poor repair, looking back to give Lial a grin that showed one missing tooth. "Followed me this far, did you? Stout Beetle. Come in."

It was clear that only a couple of rooms had been made liveable: cheap rugs for the floor, a table, a couch. The bare walls had been covered over with hangings that glimmered darkly in the gloom. Lial reached to examine one, and felt a sudden rush when his fingers encountered the unmistakable filmy smoothness of silk.

When he looked back to Terant, they had been joined by a woman, or perhaps she had always been there, shrouded by shadow and Art.

She was short and slight of build, a Spider-kind of more conventional aspect. Her robes were also silk, pale in the dimness. "A lantern for our guest, Terant," she said, her voice soft. "You forget, he does not have our eyes, for the dark." There was something cradled in her arms and he took it for a child, and then for a lumpy bag of valuables.

Terant took out an ancient-looking oil lamp and then started fumbling with flint and steel. Automatically, Lial said, "Let me," and came forward with his steel lighter, producing a flame on the third turn of the wheel and setting up a subdued glow from the lamp. He looked at his hostess, and froze, trying desperately to fix his face in a polite smile.

She wore a half-mask and it was a beautiful thing, a lattice of gold filigree and black lacquer about a many-faceted ruby that sat neatly over her left eyesocket. For material and craftsmanship that mask could have bought Lial Morless many times, and would have put a dent in even Goiter Parrymill's accounts. What froze him in place was how the mask had been made: not what it concealed, but what it revealed. It was open-lattice and sat like a spider's web over half her face, and hid not at all the fact that someone had done a great deal of work, over a

considerable period of time, to ruin her. The scar-lines filled in the detail of the mask's web, so that between them, artifice and injury, she was complete.

He swallowed any retort and managed to straighten up from the lamp and hold himself still.

"Terant, our hospitality," the woman said, and her - what? Servant, slave, friend? – fished a jug and some clay goblets from a table. The wine was brackish and cheap. Tallway would have turned her nose up at it. While the big man served, the Spider-kind woman hugged her bundle to her, an uneven, sagging thing of knots and loose ends.

Lial racked his mind for all he knew of Spiders and their cohorts. "He is of your cadre?" he asked her, nodded towards Terant.

"He is almost all the cadre I have left," the woman replied. A cadre was the close personal retinue of a Spider lady or lord, the most trusted, most capable and most valued of her staff. Lial was looking at someone who had lost out in the politics of the Spider dance, fallen far and hard.

"My name is Lial Morless, artificer," he told her.

"And you may call me Gryssa." The way she said it made it clear that it was a name of convenience. "You want silk, and nobody will sell to you. That's what Terant tells me."

"He's right," Lial admitted.

"I want to invest, but nobody will trade with me. Any reputable merchant of this city knows me as someone who has enemies. They consider me a bad risk. I, on the other hand, have access to a small supply of silk." She was watching him carefully. "Not enough to make an airship of, but I'm told that is not your intent."

Told by who? But at the same time Lial had no other offers. "I need silk, yes. I'll gladly deal with you, if I can meet your price. But I don't understand. If nobody will trade with you, how are you bringing the goods into the city?"

She just looked at him, pale living eye and rich ruby in tandem, and a moment later he realised she had shifted her bundle, trying to proffer it for his inspection. It clung to her, though, like a child, clung to her with its thin, sharp-elbowed legs. The lantern-light caught a glitter across the scatter of its eyes.

"I have one other in my cadre, save Terant," she told him, but she was looking down at her burden now, doting, and the spider in her arms looked back, linked to her by some communion of her Art. Lial shuddered uncontrollably, for although any venomous beasts of such size were long driven far from Collegium's walls, there were still houses where the nursery windows were barred to keep them out, and you still heard *stories*...

But he had no options, and they needed each other, and despite the thing in her arms, or because of it, they reached an agreement.

"Now do you remember old Cutmold Limner," grated out the iron magnate, Torqwell Glassey, as a servant topped up his wine.

Goiter Parrymill nodded almost fondly. "Oh yes. The heavier-than-air flying machine. Well, we saw where that went, sure enough."

"Down," another wit suggested, to general amusement. Parrymill was dining with some of his peers, a very comfortable affair. He had not thought of old Limner in months.

"Why drag him out?" he asked. "The old fellow was a good artificer in his day. You'll not be disrespectful, I hope."

“One of my people ran into a chap that used to be his apprentice,” Glassey explained. “Reminded me, is all.”

“Reader’s rights! *That* boy?” Parrymill shook his head. “And would you believe I offered him a perfectly decent place working on the airships, and he wouldn’t take it. So what’s he up to now?”

“Same business as the old man, from what my fellow could gather. Buying up all sorts of odds and ends in the machine parts way of things,” Glassey explained.

Parrymill had gone very still. “You’re surely mistaken,” he said softly. “I made clear to the young man months ago that Limner’s line of speculation was leading nowhere. Besides, last I heard, nobody would deal with him. He was trying to elbow into the silk trade.” *And, the unspoken thought, I made cursed sure that he’d not get the first foothold there, to build his flying machine. It’s been so long. I assumed he’d left the city or something. Has he just been planning all this time?*

“Putting together something for Clifftops in his bedroom, is he?” he asked carefully.

“Fellow’s got a workshop,” Glassey said, all apparent innocence, but there was a part of him watching Parrymill with great amusement. “Fellow’s *serious*, Goiter. He’s set up on Shallowacre. Go take a look at him, if you want.”

Parrymill made every pretence of politeness, but as soon as he could he was out of the door and heading for Shallowacre as fast as was dignified.

Then, as now, Shallowacre was not a wealthy part of the city, but a street of artisans at the bottom of their trade, whose customers were the working poor. There were three or four artificer’s workshops, but discrete questions by Parrymill’s servants showed that a Beetle of Lial’s description was indeed frequenting one such, although he did not appear to be the owner. Parrymill descended on the luckless place in great pomp, and recoiled when he came face to face with an Ant-kindén, a Sarnesh.

Now in those days matters between Sarn and Collegium were far from settled. Indeed the statesman Jons Pathawl, whose words would soon after forge a lasting peace between the two cities, was then a great thorn in the side of the Assembly and would preach about Sarn in Collegium’s parks to whoever would listen. However he had yet to turn his speeches into action and Sarn remained a militaristic northern neighbour that gave many a Collegiate citizen sleepless nights. A Sarnesh Ant was not a common sight, and here was one – no, three! – in the middle of the city. Rogues, therefore, Parrymill deduced: renegades from their city, come here for reasons of their own to set up some shabby business enterprise.

They were looking at him suspiciously, the usual Ant-kindén paranoia when presented with someone whose mind they could not read. How they got any custom was beyond Parrymill, but he forced himself to sweep into their little shop, servants in tow.

“I am looking for a friend of mine,” he informed them imperiously. “I’m told he visits here sometimes.” He looked about the cluttered room, three worktables crammed into a space devoid of elbow-room. Only Ant-kindén could work so, in each others’ hair and treading on each others’ feet. The pieces on the nearby tables seemed reasonable domestic, he noted: gas lanterns, well pumps, disarticulated pieces of cheap forge machinery. “What work do you do here?” he asked the Ants.

“Machine repairs. Factory and forge, agricultural, automotive,” the nearest one rattled off, devoid of inflection. “You have work?”

Not that I’d trust it to such as you, Parrymill thought, and shook his head with a pleasant smile. “Just mending pots and kettles then, so to speak. Well, perhaps I was misinformed.” His

eyes drifted to the furthest table. One of the Ants was standing there a little defensively, and Parrymill frowned, seeing unfolded plans, proper artificer's work. *Surely even Ants don't need schematics to repair a steam pump.*

Some part of the design, so glimpsed, did look remarkably like a wing. Parrymill was about to lunge forwards for a better look, and he could see the Ant tense to fold the thing away, when a familiar voice caught him.

"Well, Master Parrymill. It's been some while."

He turned to see none other than Lial Morless, standing familiarly in the workshop doorway. From the way the Ants relaxed at his presence it was clear their association was not a new one.

"Lial, I hope you're not doing something foolish with these..." One beringed hand indicated the Ants, but Parrymill left the sentence unfinished.

"They are doing something foolish for me," Lial replied flatly, and then, to leave no doubt, "Clifftops next year, Master Parrymill. Not so very long now, I think. I'll see you there, no doubt."

He stepped back pointedly, leaving room for Parrymill's exit, and leaving no doubt that he had no more to say. Parrymill managed a polite smile and a nod of the head before stalking away.

The workshop, the three Ants, had come to Lial by the same way as Gryssa and her silk-spider. He had finally got to the point where his plans were sufficiently advanced to need facilities, and Gryssa had accumulated sufficient silk to work with, and he had started doing the rounds, looking for somewhere that would lend him some space for the very little coin he had. His name was still familiar, though, to the artificers of Collegium. He had several offers that were withdrawn hastily when he tried to call on them, and he spent most of a month traipsing round the city, gradually lowering his expectations, trying to find anywhere that had the tools and the space for his work.

He had complained to Tallway, seeing the hand of Parrymill in this. "The old maggot's done his work well. After the silk business, nobody'll deal with me," he had explained, and the Grasshopper woman had frowned.

"Why should he care? Sky's full of insects and people," They had been up on the low roof of a little shack overlooking the river, although not too close to the edge as Tallway had once pushed him off a similar ledge in an impromptu attempt to stimulate his Art. She had her arm around him companionably, and they had been sharing a bottle of something tooth-jarringly sharp made from, if she was to be believed, radishes.

Lial had taken a moment to formulate his answer. "Insects get tired. People get tired. Machines work harder, faster, longer. That's what artifice is about. It doesn't matter how well you do things. There's always a way to do it better, and it's our duty to find it. Men like Parrymill, though, they care more about money than progress. They're onto a good thing and they don't want anyone to come up with a better way to do it."

He had seen that the urgent and irrefutable logic of the Apt world had passed her by, and then she had replied, "So sell it to Parrymill. If it's just the doing it that's the thing. Sell it to him, and then he'll help you and not stop you." She had smiled a little sadly at his instant outrage. "Or is the doing it not the point, after all?"

He had opened his mouth to protest, and she had pushed him off the roof.

Later that night he had limped home with a sprained ankle, which had been the only result of his abrupt descent, and found a note waiting for him.

Shallowacre. New workshop. The Brothers Workwell. Don't stare at them, Treat them like Citizens, and they'll Suit you Well.

The writing had been the same and, when he went to Shallowacre, there the place had been. The Sarnesh renegades gave him no believable names, probably for fear that word of them might reach their abandoned home. Instead they had scrabbled around for a good, decent Collegium-sounding monicker, and come up with Workwell. All three used it, apparently interchangeably. They were not aware of Lial's tainted reputation, and were more than happy to rent out a worktable and tools. Once they understood what he was working on they became very excited, and he learned that they had been military engineers back in Sarn, artillery-builders. His plans acquired a number of improvements based on their knowledge of stresses, tolerance and the recalcitrance of moving parts.

A tenday or so later saw Goiter Parrymill hosting guests in his townhouse: not Beetle magnates but two Fly-kindens, the foremost of whom was a slight woman with greying hair and hard features who was well known in Collegium society. She had sat through his explanation and now she shrugged, lighting a small pipe with deft fingers.

"So it's your obsession," she told him.

"We had this conversation over Limner," he reminded her.

"So we did, and we looked at Limner, and we knew he'd fail. Why should the apprentice outdo the master? Let him hurl himself off as many cliffs as he wants."

"And if it flies?"

"A dozen good artificer-magnates assure me a heavier-than-air flying machine that carries a man is quite impossible," she said, but something in her tone lacked conviction.

"And you trust that implicitly do you, Sulle?" Parrymill pressed.

"Goiter, flying machines are your business. If this boy builds a better one, that would therefore be your problem."

Goiter stared out of the window, hands behind his back, like a tactician considering the disposition of his troops. "Your messengers enjoy riding on my airships, Sulle. They get good rates."

"And that's why they ride on *your* airships, rather than your competitors'," she told the small of his back, unmoved.

"And if Lial Morless's machine flies, covers the miles faster than my airships? And if your customers realise their packages and notes and letters can get where they're going that much faster? And how much will Morless charge you? And will he want to build a machine that will take him *and* your messenger, or will he calmly suggest you hand over your solemn trust to him, and he'll drop it from the skies over the recipient's house when he flaps over?"

For a long moment Sulle regarded him. "So?" she said at last.

"So we have to know," Parrymill stated. "Like last time. Send your man in." He jabbed a thick finger at the third occupant of his parlour, an ageing, stocky Fly-kindens man who had been sitting, quiet and still, in one corner. He wore clothes of dark and slightly shabby canvas, and an artificer's toolstrip was bandoliered across his chest.

Sulle made the sort of face she always did at unavoidable expense. "Master Turlo," she named him, "You understand what is required of you? Just like last time, yes?"

The Fly man nodded. Collegium bred an odd crop of experts, and Turlo was a particular specialist. Most accredited artificers from the College found roles in the daylight business of designing, building and mending machines. Turlo had turned his tools and his hands to less legitimate ends. With wings and lockpicks and an impeccable sense of order, there was barely a house in Collegium he could not enter, search through, and leave without the owner ever knowing he had been there. For all that, he disdained theft, despite the reputation his kinden had for it. He was an artificer, a professional. His front business was in thief-proofing but his meat and drink was professional rivalry within the trade, and many a jealous engineer had paid his considerable fees to know just what a competitor was working on.

He nodded politely to his two patrons, and went about his business.

Only two days later he returned a detailed report concluding that the machine that Lial Morless was attempting to build at the Workwell workshop could not work, with itemised reasons why.

And, a few tendays after that, the entire report, scrupulously copied, was left in the Workwell workshop, together with a simple note, in handwriting now more than familiar to Lial Morless: *Read this. If you're going to do this then get it Right.*

Lial sat down with the Workwell brothers and they went through Turlo's points one by one. Each one was valid, each was something Lial had not considered. A master artificer had crept into the workshop, undetected and unheralded, and concluded that Lial's flying machine would never get off the ground, and had been sufficiently proud of his knowledge, or conscientious about the services he was providing, to go into explicit detail. Months, perhaps years of frustration had just been taken from Lial's back by someone who very plainly did not have his best interests at heart.

"Someone working for Parrymill, or one of his friends," he concluded to Tallway, later. He still got drunk with her, when she wasn't trying to push him off things. Sometimes she tried to scare him, too, leaping out on him from around corners, wearing grotesque masks. None of it had got him off the ground.

"Your contest thing is a long way off," she said dubiously. If he wants to stop you before then, got plenty of chances. Set the workshop on fire, I would."

"Three Ant-kindens in a strange city don't all sleep at the same time. There's always one of them around the workshop. That's the problem. Whoever is dropping these letters off knows them, but they'll not tell me anything. Someone's stringing me along like a puppet."

But by that time Tallway had located another bottle, and was far more interested in its contents than Lial's fears.

Some tendays went by and the airship trade picked up, and Goiter Parrymill was more concerned with his own business than with Lial's. Clifftops was still a year off, and Lial was keeping his head down. Still, he and the Ant brothers had got past the theoretical, and had begun making parts and pieces, just one at a time at first, and then a few together, hinges and gear trains. The Ants made a clockwork motor of their own design, that was as light and compact as they could get it, and then tested it until they destroyed it, and then started again, experimenting with how much they could punch and cut from the gears, and precisely where, without sacrificing the all-important strength. Lial remembered all too well the way the gears on Limner's *Mayfly* had gone. His flier would be lighter, half the weight or even less, but it would be him in it, and he only had the one life to risk. Clifftops was still over a year away and he had no intention of angling for a spectacular public death the way that Limner had. A *test flight*, which meant that of

course he had to build the wretched machine, and where could that be accomplished, within the cramped confines of the Workwell place? In the end it was the Ants themselves who had the solution. They were used to a city that neither liked them nor trusted them. When they had a problem they solved it themselves, rather than going to others for help. When there was no space left inside they took it all up to the roof. Like most buildings in Collegium, their workshop had a flat top, where Lial and Tallway had already spent a few hazy evenings watching the sunset and talking philosophy. Now the roof became an extension of the workshop itself, cluttered with pieces, with the frame of the machine beginning to sketch itself out in disjointed rods and spars. The numerous children of a neighbouring Fly-kindens baker were paid a meagre stipend to keep watch over the whole and warn of thieves or vandals.

None of this escaped Goiter Parrymill's attention for long. Once the skeletal frame of wood and hollowed metal began monopolising the Workwell roof, people began to talk, and Parrymill had a man who went to look at the place every month, and whose usually barren reports were suddenly ignited by the spectral shape taking piecemeal life over the little businesses of Shallowacre.

Sulle, when he called her, was decidedly put out.

"Turlo said so. It won't fly. On that basis, let him build a hundred of them."

But Parrymill was troubled. "I want Turlo to take another look at it."

Sulle had her miniscule hands on her hips, utterly out of patience. "Goiter, you're a leading magnate of the city, and Morless is a fool apprentice, so how is it that you're looking more and more the fool, and making him into some great and important threat to life and freedom? Turlo's expensive--"

"I'll pay it all. I don't care," Parrymill growled, cutting her off. "If you can't see then danger you're in, then too bad. I was an artificer before I was a merchant, Sulle. I have a sense for these things." He turned to glower at her, but her steel stare was a match for him.

"Tell me," she said flatly. "Give me the missing piece."

Parrymill's face sagged. "When I was at the College, there was a band of us wanted to gain the skies. Airships. Airships won out, and every one of us is a rich man in his own right now, and not just a rich man's hired tinker. But we looked at it all ways. We did our calculations. There is no reason why a heavy self-powered flyer shouldn't work. And then we looked at the numbers and we wrote a great big paper saying how heavier-than-air flight just wasn't feasible. We knew we could put an airship up right then, you see, and corner the market, own the sky. We couldn't have put a heavy flier up. Ten years of development and research and we could have done it, but by then we'd be just one among many. The mechanics of it said one thing, but the money said another."

"You pulled the wool over on the whole College?" Sulle said, half-impressed and half-derisive.

"Did we?" came Parrymill's bitter response. "Then why Clifftops? Why Limner, and a half-dozen before him I could name that still tried their hand at it. Every year I'm having to bring my influence to bear to discourage someone else. Every year a new challenger!" His face, just then, was a man driven to guilty treason. "It can be done. It will be done. If not Morless then some other. But I'd go be a fisherman before I let Limner's apprentice take my empire from me. Get me Turlo. Tell him to take another look."

Sulle sighed, but nodded.

Two nights later Turlo found the Fly children keeping watch, and paid them somewhat more coin than their regular wage to render him invisible to their eyes, on the proviso that he

didn't break anything or steal anything, for they had an odd remnant honesty about them. He pored over the half-built machine for over an hour, making notes and sketches. He was assisted by the advanced stage of the project, which had come on with almost prescient leaps and bounds since he had last viewed it. The winged construction he was examining seemed on the very point of metaphorphosis into its complete and finished form. In his artificier's soul, which was as pure as any College master's, he professed himself impressed.

The report he left with Parrymill was exhaustive, but on the front page he had written three emphatic words. *It will fly.*

When the next message arrived, Lial was half-expecting it. He had gone some months now without contact from his mysterious patron, but he had kept each of the little notes, the handwriting of the puppeteer who was guiding his hands. He should be glad, he knew. He would be nowhere, if not for that unasked aid. If it had been in Lial's nature to go with the prevailing winds, though, he would not currently be trying to put a heavier-than-air flier into the sky. His reliance on his unseen benefactor rankled and he was waiting for the scales to swing the other way, for the price to be demanded from him.

The message was waiting by his worktop, weighed down by a pouch. It read:

You've done Well. Celebrate. Invite Everybody.

There was money in the pouch, silver Standards of Helleron mint, all of which had seen a fair round of use since they came off the dies.

"Who brought this in?" Lial demanded, but the Ants just said that it had been a messenger, some Fly perhaps. They had a fine line in sullen Ant silences when he pressed them too far, and he was well aware that he was living very much on their good graces.

Celebrate. There was no reason he should. There were plenty of other places where the money was actually needed. He stared at the words, though. If they had a little get-together, here at the workshop, would his patron step from the shadows?

And it had been a long time since he had last thrown a party, his College days, in fact. It had been a good three tendays since his last drunken stint with Tallway, even.

"Me, the three of you," he told the Workwell brothers. "Gryssa and Terant. Tallway. Lanzo's family," meaning their Fly-kindeen watchers. "Can we fit all of that in here? All of that plus one more, maybe?"

And the Ant-kindeen could fold everything away, of course. They were used to a military life, of travelling compactly and usually on foot. There would be a party.

He gave some of the money to Lanzo, to procure some food, and more for Lanzo's middle cousin, who could play the lyre quite well. He took Tallway's recommendations regarding the pick of Collegium's cheap-but-drinkable, although he made those purchases himself, as experience had taught him that Tallway could not be trusted to purchase alcohol without consuming the bulk of it before delivery.

Three nights later they all came: the Spiders, the Grasshopper exile, the swarm of Fly-kindeen. It was a confused and awkward gathering at first, but Tallway took the edge of that, regaling them with the kind of rambling story that she made most of her livelihood by, where even the digressions had digressions of their own. After that, when she had most of them laughing, and had even drawn a smile from Gryssa's butchered face, tensions eased, and the motley outcasts' assembly got to work on the wine.

It was near to midnight when the knock came, at the door. Tallway was inexplicably succeeding in teaching the Workwell brothers some Commonwealer dance, and Lial had ended

up sitting on the roof-edge with Terant, the big Spider-kind, who said little but listened well. When Lial saw a diminutive figure approach the door, his words dried up and he felt his heart skip, but when one of the Ants opened up, the lamplight from inside illuminated only one of Lanzo's brood, home late from whatever employment she had managed to scrounge. A moment later, though, Tallway had bounded up onto the roof, drink and her Art almost springing her over the edge before she could regain her balance. "Lial! Come see!" she exclaimed, grinning madly. Lial realised that the music had died, down below, and the talk also. If Tallway hadn't found whatever it was so hilarious, he would have been reaching for his knife.

There were mixed expressions downstairs. Lanzo's family seemed to share Tallway's point of view but Gryssa was looking haughtily offended, and the Ant-kind were, for once, openly bewildered.

"What is it?" he asked the room at large. Tallway fished a pamphlet from a little stack that had presumably been brought in by the latecoming Fly-kind.

It was what they called a 'polemic', merry little satires usually put about to lampoon and ridicule the great and good. Lial started at the crude illustration on the frontpiece, and read out the title. "*Big Beetle Learns to Fly*," he murmured.

"It's wonderful!" Tallway jostled him. "Look, I'm in it. I jump!"

Lial flicked through the pages. The feeling that came to him took him way back, to when he was a child at school, with some calculation or piece of logic gone awry and the other children laughing at him. Someone was laughing at him. Possibly the whole city was laughing at him. His work, his great work, the death of his mentor and his lofty ideals, had been laid bare for the derision of the masses.

What am I doing here? he wondered bitterly. *I should have listened to Parrymill when I had the chance.* He held the polemic open, letting its few badly-printed pages flutter open, seeing little caricatures: a grasshopper, two spiders, some ants, and all through it the clumsy, foolish beetle who wanted to fly.

He frowned. "So who's 'Small Helpful Beetle?' Do they mean Lanzo?" It seemed unlikely that the anonymous author did. At that moment there came another knock at the door.

Everyone turned to it, corpse-silent. Lial put down the polemic softly, as though even the sound of rustled paper would trigger some calamity, and lifted the latch.

His hopes died immediately. A short and grubby figure was thrusting forwards a folded paper. No great confrontation, then: just another note.

In a few days the Workshop will be Attacked. They will be Watchmen suborned by Parrymill. Be ready to Defend what you have Built.

Lial swore, and he sensed the others changing the way they stood, from at ease to readied. *When did I become their leader?*

He realised the messenger was still there and automatically fumbled in his pouch for a coin, but when he proffered the little ceramic bit, the Fly would not take it.

"Lial Morless," he said instead, and Lial blinked, looking again, seeing not a bulky Fly, but a man of mixed blood, Fly and Beetle both, wrapped in a threadbare long-coat, and with a woollen cap on his head, but no less familiar for all of that.

"Scop?" he said hoarsely. It had been a good year since Cutmold Limner's forge-hand had walked out, and his path and Lial's had never crossed since then. Or so Lial had believed.

"Lial," Scop said, and walked in, looking from face to face, seeing offence and uncertainty and, in Tallway's case, barely-contained giggling.

“We have preparations to make,” he told them all, and Lial felt his briefly assumed leadership evaporate in the face of the halfbreed’s utter certainty.

“You’ve done well,” Scop said. As if the Ant-kindens mindlink had briefly expanded to include everyone except him and Lial, all the others had returned to the wine and the food with a will, and given over the roof for more private matters. Lial watched with a mixture of bafflement and resentment as the halfbreed studied the lines of the half-completed flying machine.

“You know,” Scop added after a moment, “when I left Limner’s place, I didn’t think you meant it. I thought it was any apprentice’s mad dream, that it would be forgotten in a tenday, and you’d find another position and end up somewhere comfortable and unambitious, like most artificers in this city. When I heard you’d got as far as shopping for silk, I knew I was wrong. I’m glad of that. This is good work.”

He was not the man Lial remembered: Limner’s deferential, humble forge hand. Scop was filled with an iron purpose. “How did you find out?” Lial demanded of him. “What business is this of yours?”

Scop turned to him, and the lanterns cast his face without sympathy in it. “I found out because by then I’d got myself new work, Lial, a new master.”

“Who?”

“Goiter Parrymill.”

Lial stared at him. Each time he tried to assemble the pieces, the picture made less sense. “He hired you? Because you used to work for...?”

“He has no idea who I am. He’s never met me. His steward hired me, because Parrymill’s such a tight bastard that he can’t ever keep decent staff, respectable staff, not for the filthy jobs: only foreigners and debtors, and halfbreeds. I’m the man that shines the shoes of his better servants, Lial. I’m the man that cleans out his privy. And because I’m mixed-blood, the other servants take advantage of me. I do all sorts of other peoples’ jobs, when the steward’s not looking. I go everywhere in Parrymill’s townhouse. I read all his letters. I don’t think they realise I can.” The speech was delivered in flat, hard words that had a lot of pent-up anger beaten into them. “When Parrymill was warned not to deal with a fallen Spider Arista, I passed her onto you. When the other servants were taking Parrymill’s goods to be fixed by Ant-kindens, because the housekeeping monies were pitiful and the Ants were cheap, I passed them onto you too. And when Parrymill got worried enough about you to commission a report on your machine, well, you know the rest.”

Lial shook his head. There was no real affection for him in Scop’s eyes, only the pride of a smith who has made a sword that will slay emperors. “Is this just to get at Parrymill for the work he makes you do?” he tried. “Why are you doing all of this?”

“Why are you?” Scop turned on him.

“Because I was Cutmold Limner’s apprentice, and he had a dream!” Lial shouted at him. “And that means something!”

“Yes, it does,” Scop confirmed. “And I was his forge hand, Lial.” He used the personal name as if he were hammering in nails with it. “Think, for a moment, what I am now. Ten years around machines, and I know as much as most who have their College accredits, but I’m the man who cleans the privies because nobody wants a halfbreed artificer. Limner was different. He didn’t care about the blood. For that, I’ll make you fly.”

Lial had nothing to say to that. From below came the sounds of Tallway launching into another tangled tale. “The money for the party...” he managed weakly.

“Some of what I’d saved. I never did have much of a taste for indulging myself. The rest went on the polemics.”

A jolt of undirected rage went through Lial at the very mention. “You...? But why do all that, just to knock us all down...?”

Scop shook his head. “Lial, the polemics are all over the city by now. Collegium loves a good satire with a few funny drawings. Everyone *knows*, Lial. This isn’t some secret that Parrymill can do away with and throw a cloak over. Whether they’re laughing at you or not, people are waiting for you to try your wings.”

For a long while Lial looked at the little halfbreed. He searched his heart and realised that, in the last ten minutes, he had become afraid of Scop. He abruptly had no idea what the man might not be capable of.

“Which leads us to my most recent note. You’ve not forgotten, I trust?” Scop prompted.

In a few days the workshop will be attacked, Lial remembered. “They’re really going to come here...?”

“Parrymill’s terrified that you might reduce the value of his airship empire by three parts in a hundred,” Scop confirmed, “and for that he’s gone to a watch officer friend of his and told him about the dangerous treasons that you’re plotting with all manner of foreigners. You’ll get a couple of nights in the cells before they decide it was all a mistake, but in the meantime the machine will be destroyed, your charts and notes confiscated, everything wrecked..”

“Then what do we do?” Lial asked, and as he said it he realised that he had given in at last. He had accepted Scop’s authority over him, accepted that every success of the last year was a gift of the halfbreed’s hand. “Look at them down there: renegade Sarnesh, rogue Spider-kinde. They’d all face exile if they so much as raised a hand to a watchman.”

“You have perhaps three days, and the nights that go with them,” Scop said. “Thanks to the polemic the city is watching, and I hope that may stay Parrymill’s hand long enough.”

“Long enough for what?” demanded Lial.

“Finish the machine,” Scop told him.

The city watch of Collegium was not just redeployed army men, as in Ant cities, nor was it the foreign mercenaries and house guard of the Spiderlands or the partisan, privately hired militia of Heleron. Collegium’s watch was engaged by the Assembly on behalf of the city, and for the most part did its duty well enough. Human nature was a rock on which many good intentions had foundered, though, and so enter Maxel Rodder, fifty years of plodding watch officer, whose priorities were for the comfort of his anticipated retirement. If so much of a man as Goiter Parrymill assured him that the Workwell workshop was a nest of crime and double-dealing then he needed no further prompting, and so it was that he and a half-dozen watchmen marched through the streets of Collegium towards Shallowacre.

The influx of outlanders was a common topic of debate in those years, being brought before the Assembly at least once a month. In time, and especially after the settling of matters with Sarn, calmer heads would prevail, but at that moment there were many Beetles in Collegium who fretted about the number of other kinde on their streets, and what they might be up to. So it was that a watch officer like Rodder could feel justified in utilising a heavy hand against, say, a gang of rogue Sarnesh who had irked one of the great and good.

He was preceded into Shallowacre by a flurry of Fly-kinde children, scooting ahead of him at gutter-height, but that was a common-enough thing, Fly-kinde being forever curious for spectacle, and so he paid it no heed. Instead he spotted the Ant workshop ahead and slowed his

pace, deciding that his years merited the ‘awful majesty of the law’ approach, rather than the more exerting ‘catch them at it’ rush that younger men might have tried.

Indeed, the Ant-kindens appeared to be waiting for him. At the back of his mind had been a worry that Ant-kindens were habitually violent and of poor judgment, and that this might actually turn ugly. His men had come weighed down with chainmail, helm and breastplate, and they had maces, crossbows and round shields. Greater than those was the partisan aegis of Collegium law, which would look extremely narrowly on any foreigner that raised a hand against its own. Still, that would be poor solace for the man who ended up with an Ant dagger in his eye.

However, the scene that met him was as peaceable as any in the city. The three near-identical Ants stood, as if on parade, before a workshop whose small dimensions were utterly crammed with worktables and pieces of disassembled artifice. Rodder had been briefed by Master Parrymill as to what he was looking for: plans, part-complete mechanisms of some kind of flying automotive, and of course the item itself, which he knew to be above on the roof. He had anticipated sweeping in, confiscating everything that looked pertinent, and sorting it out later. Seeing the true state of things, he realised that he should have brought a score more men just to carry everything out.

“Where are the plans for the flying machine?” he demanded of the Ants, optimistically. They stared at him without expression. Rodder was aware that a crowd was slowly accumulating, other residents and artisans of Shallowacre taking in a free piece of street theatre.

Rodder was no artificer, but he was a Collegium Beetle and had a good idea what he was looking for. Searching through the Workwell’s piled junk would be the work of a tenday, though, and Parrymill had stressed the urgency of the task. “The roof,” he snapped, and did his best to shoulder past the Ants and to the stairs. The Ants themselves, the model of civic obedience, stepped meekly aside. The clutter of their workshop did not. There was not space for an armoured Beetle-kindens to make any headway at all, and for a moment Rodder was stalled by sheer logistics.

He ordered the Ants to clear a path to the stairs. They looked at him blankly, as if to say ‘whyever for?’ He told them to get the workbenches out of the way. They began painstakingly unloading the tables, piece by piece. Nothing of them indicated defiance. There was not the slightest rough edge that Rodder could use as a trigger for justifiable arrest or persecution. He was acutely aware of the several dozen spectators, a good half of whom, given Shallowacre’s low rents, were also foreigners.

But on the other hand, Parrymill would be waiting for his report. With a snarl of frustration Maxel Rodder took hold of the nearest workbench and upended it, spilling parts and tools, papers and piecework across the floor. “Clear that up you Ant bastard,” he snapped, halfway hoping for some supporting murmur from the crowd. Instead the silence behind him was stony. Still, he was committed now, and forged ahead to the foot of the stairs, flinging everything out of his way.

He was just about to ascend, his men after him, when one of the Ants spoke up.

“Excuse me, but we do not use the stairs. Possibly they are unsafe,” one of the Workwells informed him.

“I know you work on the roof,” Rodder levelled at him. The man shrugged.

“We go up the outside wall if we need to. Our Art, you understand.”

“Likely,” snorted Rodder, and went up the stairs on the double.

The growing crowd of onlookers was treated to a brief but memorable duet for metal armour and cursing, and Rodder and most of his men reappeared at the bottom of the stairs. For a

moment it was unclear what had transpired, but then it became apparent that several of them were in some way attached to one another, and that at least one of the watch remained stuck halfway up. What had seemed originally to be dust covering them was revealed as strands of silken web, of a particularly adhesive kind, and precious minutes were wasted in the watchmen disentangling themselves.

“We do not use the stairs,” the Ant repeated. “We believe there is a spider.” His hands indicated a beast of variable but alarming size.

After that there was nothing for it but for Rodder and his men to go up with maces at the ready, using lighter-flames to burn through such webs as they found, and cautiously at that because a fair proportion of Shallowacre was flammable. Their ascent to the roof of the Workwell workshop became as difficult and painstaking as mountaineering.

But at last, because he was nothing if not determined, Rodder cleared the roof, and there he saw it.

It was an unlovely thing. Even silk stretched over a skeleton of wood and steel can be ugly, and this machine was a triumph of practicality over aesthetics. The front end looked too broad and heavy, angular and lumpy like a spider’s cocooned victim, cupped about the single bare seat and the few sticks that served as the vessel’s meagre controls. The back end tapered off into a two-pronged rudder, seeming too fragile. The ribbed wings themselves were half-closed, up and back, at an unnatural angle. Nothing that flew in life would have held itself so.

There were three people up on the roof, Rodder saw. A small Fly – no, some Fly halfbreed – and some lanky, sallow foreign woman were watching him as he clambered out into the air. The third was a Beetle-kinde man, and he was working at the machine.

At that moment Rodder saw how he had been made a fool of, what all the stalling had been for. The Beetle was not mending it, or building it. He was *winding* it, priming an engine.

“Right, you bastard, you’re under arrest!” Rodder shouted. “You stop that right now.”

The artificer stopped, indeed, straightening up and looking back at Rodder. Then, in one movement, he had swung himself over the side and was sitting in the machine.

Rodder lunged for him, even as his watchmen were pulling themselves up onto the roof. The artificer was reaching for the controls, but Rodder reckoned that if he could get a hand onto any part of that unwieldy looking machine then it wasn’t going anywhere.

Lial swore, seeing the watch officer lunge. The lever that engaged the clockwork was stiff. He hauled on it. The man’s hand clawed for the unnamed flier’s hull.

He heard a whoop from Tallway, who had been reeling drunk from before dawn, and a moment later the watch officer was receding backwards at twice the speed, because the Grasshopper-kinde had *kicked* him hard enough to put the imprint of her bare foot in the steel of his breastplate.

He struck the rest of his men, knocking at least one back down the stairs, and then they had to help him get his armour off, because the dent was stopping him drawing breath, and Tallway turned to Lial and grinned like a maniac.

The lever slipped free at last, and the wings slammed down with a clap like thunder. Tallway and Scop leapt into the air with their own Art wings, and one of the watchmen ended up hanging off the edge of the building, which further inconvenienced his fellows.

The machine leapt skywards with a drunken lurch that Tallway would have been proud of, the rhythm of the engine’s gears rattling every spar. The wings were thundering, a blur of

silk, and Lial heard the engine complaining. In his mind was the fatal sound of Cutmold Limner's own machine, when the gears had come apart.

The nose tilted downwards. He had spent evenings arguing with the Workwells about that nose, the precise distribution of weight. On the ground they had been able to balance the machine on a point but, with the wings flailing, the weight was constantly shifting forwards and back, and abruptly the flier was pitching and dropping.

And Lial took a deep breath, bracing his knees against the hull, and opened his own wings.

It had been last night. It was the reason that Tallway was even more sodden than usual. Looking at his creation, knowing that on the morrow he would fly or fail, Lial had been struck by a sudden moment of utter revelation. The sky was his now, The limitations of artifice had failed to hold him back and, in that moment, the shackles of Art had likewise given way.

And the flying machine was as light as they could possibly make it, and its own wings were doing their best, and all it needed was a little extra lift.

Lial felt some part of him that he had never owned to before wrench and strain, and his Art guttered and waxed, the shimmering of his wings there one moment, gone the next, but the nose was up, the nose was up and he was skimming the rooftops of Shallowacre before casting himself and his machine over Collegium, startling Fly-kinde with the beat of his artificial wings, and with such a clatter of engine that every citizen below looked up.

By the time he reached the better parts of the city he could feel the engine winding down, and when he came in to land it was at a glide, the wings barely moving. He landed before the gates to the Great College, though, with a hundred scholars and students as his witnesses.

The next year at Clifftops Lial brought his machine, but there were already two manned competitors waiting to contest with him. Two years later, and manned, heavier-than-air fliers were sufficiently commonplace that the College officials brought the competition to an end.

Lial himself became one of the youngest ever College Masters. Although his precise influence on the matter is unknown, during his tenure the first ever halfbreed student was accepted into the College.

Although Lial Morless was to be one of the great heroes of artificing, more level-headed historians now play down his influence. It was clear, they say, that manned orthopters would have been achieved within a few years of his maiden flight, by someone else if not by him. Besides, the airship trade continued blissfully unaffected by the introduction of heavier-than-air fliers, as airships had a greater range, and could carry vastly more cargo, although the Messenger's Guild was forced to adapt considerably. Professional opinion continued to play down the import of orthopters and other heavy fliers right up until the year 538, when the Wasp Empire commenced its invasion, and the character of the skies changed forever.