



It is hard to understand nothing, but the multiverse is full of it. Nothing travels everywhere, always ahead of something, and in the great cloud of unknowing nothing yearns to become something, to break out, to move, to feel, to change, to dance and to experience – in short, to *be* something.

And now it found its chance as it drifted in the ether. Nothing, of course, knew about something, but this something was different, oh yes, and so nothing slid silently into something and floated down with everything in mind and, fortunately, landed on the back of a turtle, a very large one, and hurried to become something even faster. It was elemental and nothing was better than that and suddenly the elemental was captured! The bait had worked.

Anyone who has ever seen the River Ankh sliding along its bed of miscellaneous nastiness would understand

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why so much of the piscine food for the people of Ankh-Morpork has to be supplied by the fishing fleets of Quirm. In order to prevent terrible gastric trouble for the citizenry, Ankh-Morpork fishmongers have to ensure that their suppliers make their catches a long, long way from the city.

For Bowden Jeffries, purveyor of the very best in seafood, the two hundred miles or more which lay between the fish docks at Quirm and the customers in Ankh-Morpork was a regrettably long distance throughout the winter, autumn and spring and a sheer penance in the summertime, because the highway, such as it was, became a linear furnace all the way to the Big City. Once you had had to deal with a ton of overheated octopus, you never forgot it; the smell lasted for days, and followed you around and almost into your bedroom. You could never get it out of your clothes.

People were so demanding, but the elite of Ankh-Morpork and, indeed, everyone else wanted their fish, even in the hottest part of the season. Even with an icehouse built by his own two hands and, by arrangement, a second icehouse halfway along the journey, it made you want to cry, it really did.

And he said as much to his cousin, Relief Jeffries, a market gardener, who looked at his beer and said, 'It's always the same. Nobody wants to help the small entrepreneur. Can you imagine how quickly strawberries turn into little balls of mush in the heat? Well, I'll tell you: no time at all. Blink and you miss 'em, just when everybody wants their strawberries. And you ask the watercress people how difficult it is to get the damn stuff to the city before it's as limp as a second-day sermon. We should petition the government!'

'No,' said his cousin. 'I've had enough of this. Let's write to the newspapers! That's the way to get things done. Everyone's complaining about the fruit and vegetables and the seafood. Vetinari should be made to understand the plight of the small-time entrepreneur. After all, what do we occasionally pay our taxes for?'

Dick Simnel was ten years old when, back at the family smithy in Sheepridge, his father simply disappeared in a cloud of furnace parts and flying metal, all enveloped in a pink steam. He was never found in the terrible haze of scorching dampness, but on that very day young Dick Simnel vowed to whatever was left of his father in that boiling steam that he would make steam his servant.

His mother had other ideas. She was a midwife, and as she said to her neighbours, 'Babbies are born everywhere. I'll never be without a customer.' So, against her son's wishes, Elsie Simnel decided to take him away from what she now considered to be a haunted place. She packed up their belongings and together they returned to her family home near Sto Lat, where people didn't inexplicably disappear in a hot pink cloud.

Soon after they arrived something important happened to her boy. One day while waiting for his mother to return from a difficult delivery, Dick walked into a building that looked interesting, and which turned out to be a library. At first he thought it was full of poncy stuff, all kings and poets and lovers and battles, but in one crucial book he found something called mathematics and the world of numbers.

And that was why, one day some ten years later, he pulled together every fibre of his being and said, 'Mother, you know last year when I said I were going 'iking in the mountains of Uberwald with me mates, well, it were kind of ... sort of ... a kind of lie, only very small, mind you.' Dick blushed. 'You see, I found t'keys to Dad's old shed and, well, I went back to Sheepridge and did some experimenting and ...' he looked at his mother anxiously, 'I think I know what 'e were doing wrong.'

Dick was braced for stiff objections, but he hadn't reckoned on tears – so many tears – and as he tried to console her he added, 'You, Mother, and Uncle Flavius got me an education, you got me the knowing of the numbers, including the arithmetic and weird stuff dreamed up by the philosophers in Ephebe where even camels can do logarithms on their toes. Dad didn't know this stuff. He had the right ideas but he didn't have the ... *tech-nol-ogy* right.'

At this point, Dick allowed his mother to talk, and she said, 'I know there's no stopping you, our Dick, you're just like your stubborn father were, pigheaded. Is that what you've been doin' in the barn? Teck-ology?' She looked at him accusingly, then sighed. 'I can see I can't tell you what to do, but you tell me: how can your "logger-reasons" stop you goin' the way of your poor old dad?' She started sobbing again.

Dick pulled out of his jacket something that looked

like a small wand, which might have been made for a miniature wizard, and said, 'This'll keep me safe, Mother! I've the knowing of the sliding rule! I can tell the sine what to do, and the cosine likewise and work out the tangent of t'quaderatics! Come on, Mother, stop fretting and come wi'me now to t'barn. You must see 'er!'

Mrs Simnel, reluctant, was dragged by her son to the great open barn he had kitted out like the workshop back at Sheepridge, hoping against hope that her son had accidentally found himself a girl. Inside the barn she looked helplessly at a large circle of metal which covered most of the floor. Something metallic whizzed round and round on the metal, sounding like a squirrel in a cage, giving off a smell much like camphor.

'Here she is, Mother. Ain't she champion?' Dick said happily. 'I call her Iron Girder!'

'But what is it, son?'

He grinned hugely and said, 'It's what they call a pro-to-type, Mother. You've got to 'ave a pro-to-type if you're going to be an engineer.'

His mother smiled wanly but there was no stopping Dick. The words just tumbled out.

'The thing is, Mother, before you attempt owt you've got to 'ave some idea of what it is you want to do. One of the books I found in the library was about being an architect. And in that book, the man who wrote it said before he built his next big 'ouse he always made quite tiny models to get an idea of how it would all work out. He said it sounds fiddly and stuff, but going slowly and being thorough is the only way forward. And so I'm testing 'er out slowly, seeing what works and what doesn't. And actually, I'm quite proud of me'sen. In the beginning I made t'track wooden, but I reckoned that the engine I wanted would be very 'eavy, so I chopped up t'wooden circle for firewood and went back to t'forge.'

Mrs Simnel looked at the little mechanism running round and round on the barn floor and said, in the voice of someone really trying to understand, 'Eee, lad, but what does it *do*?'

'Well, I remembered what Dad said about t'time he were watching t'kettle boiling and noticed t'lid going up and down with the pressure, and he told me that one day someone would build a bigger kettle that would lift more than a kettle lid. And I believe I have the knowing of the way to build a proper kettle, Mother.'

'And what good would that do, my boy?' said his mother sternly. And she watched the glow in her son's eyes as he said, 'Everything, Mother. *Everything*.'

Still in a haze of slight misunderstanding, Mrs Simnel watched him unroll a large and rather grubby piece of paper.

'It's called a blueprint, Mother. You've got to have a blueprint. It shows you how everything fits together.'

'Is this part of the pro-to-type?'

The boy looked at his doting mother's face and realized that a little more exposition should be forthcoming. He took her by the hand and said, 'Mother, I know they're all lines and circles to you, but once you have the knowing of the circles and the lines and all, you know that this is a picture of an engine.'

Mrs Simnel gripped his hand and said, 'What do you think you're going to do with it, our Dick?'

And young Simnel grinned and said happily, 'Change things as needs changing, Mother.'

Mrs Simnel gave her son a curious look for a moment or two, then appeared to reach a grudging conclusion and said, 'Just you come with me, my lad.'

She led him back into the house, where they climbed up the ladder into the attic. She pointed out to her son a sturdy seaman's chest covered in dust.

'Your granddad gave me this to give to you, when I thought you needed it. Here's the key.'

She was gratified that he didn't grab it and indeed looked carefully at the trunk before opening it. As he pushed up the lid, suddenly the air was filled with the glimmer of gold.

'Your granddad were slightly a bit of a pirate and then he got religion and were a bit afeared, and the last words he said to me on his deathbed were, "That young lad'll do something one day, you mark my words, our Elsie, but I'm damned if I know what it's going to be."'

The people of the town were quite accustomed to the clangings and bangings emanating every day from the various blacksmith forges for which the area was famous. It seemed that, even though he had set up a forge of his own, young Simnel had decided not to enter the blacksmithing trade, possibly due to the dreadful business of Mr Simnel Senior's leaving the world so abruptly. The local blacksmiths soon got used to making mysterious items that young Mr Simnel had sketched out meticulously. He never told them what he was constructing, but since they were earning a lot of money they didn't mind.

The news of his legacy got around, of course – gold always finds its way out somehow – and there was a scratching of heads among the population exemplified by the oldest inhabitant, who, sitting on the bench outside the tavern, said, 'Well, bugger me! Lad were blessed wi' an inherited fortune in gold and turned it into a load of old iron!'

He laughed, and so did everybody else, but nevertheless they continued to watch young Dick Simnel slip in and out of the wicket gate of his old and almost derelict barn, double-padlocked at all times.

Simnel had found a couple of local likely lads who helped him make things and move things around. Over time, the barn was augmented by a host of other sheds. More lads were taken on and the hammers were heard all day every day and, a bit at a time, information trickled into what might be called the local consciousness.

Apparently the lad had made a pump, an interesting pump that pumped water very high. And then he'd thrown everything away and said things like, 'We need more steel than iron.'

There were tales of great reams of paper laid out on desks as young Simnel worked out a wonderful 'undertaking', as he called it. Admittedly there had been the occasional explosion, and then people heard about what the lads called 'The Bunker', which had been useful to jump into on several occasions when there had been a little ... incident. And then there was the unfamiliar but somehow homely and rhythmic 'chuffing' noise. Really quite a pleasant noise, almost hypnotic, which was strange because the mechanical creature that was making the noise sounded more alive than you would have expected.

It was noticed in the locality that the two main coworkers of Mr Simnel, or 'Mad Iron' Simnel as some were now calling him, seemed somewhat changed, more grown-up and aware of themselves; young men, acolytes of the mysterious thing behind the doors. And no amount of bribery by beer or by women in the pub would make them give up the precious secrets of the barn.* They conducted themselves now as befitted the masters of the fiery furnace.

And then, of course, there were the sunny days when young Simnel and his cohorts dug long lines in the field next to the barn and filled them with metal while the furnace glowed day and night and everyone shook their heads and said, 'Madness.' And this went on, it seemed for ever, until ever was finished and the banging and clanging and smelting had stopped. Then Mr Simnel's lieutenants pulled aside the double doors of the big barn and filled the world with smoke.

Very little happened in this part of Sto Lat and this was enough to bring people running. Most of them arrived in time to see *something* heading out towards

^{*} There were some salacious comments about this, but it appeared, alas, to the local and as yet unmarried girls that Mad Iron Simnel and his men had found something more interesting than women and apparently it was made of steel.

them, panting and steaming, with fast-spinning wheels and oscillating rods eerily appearing and disappearing in the smoke and the haze, and on top of it all, like a sort of king of smoke and fire, Dick Simnel, his face contorted with the effort of concentration. It was faintly reassuring that this something was apparently under the control of somebody human – although the more thoughtful of the onlookers might have added 'So what? So's a spoon,' and got ready to run away as the steaming, dancing, spinning, reciprocating engine cleared the barn and plunged on down the tracks laid in the field. And the bystanders, most of whom were now byrunners, and in certain instances bystampeders, fled and complained, except, of course, for every little boy of any age who followed it with eyes open wide, vowing there and then that one day he would be the captain of the terrible noxious engine, oh yes indeed. A prince of the steam! A master of the sparks! A coachman of the Thunderbolts!

And outside, freed at last, the smoke drifted purposefully away from the shed in the direction of the largest city in the world. It drifted slowly at first, but gathered speed.

Later that day, and after several triumphant turns around the short track in the field, Simnel sat down with his helpers.

'Wally, Dave, I'm running out of brass, lads,' he said. 'Get your mothers to get your stuff together, make us some butties, bring out the 'orses. We're taking Iron Girder to Ankh-Morpork. I 'ear it's the place where things 'appen.' * * *

Of course Lord Vetinari, Tyrant of Ankh-Morpork, would occasionally meet Lady Margolotta, Governess of Uberwald. Why shouldn't he? After all, he also occasionally had meetings with Diamond King of Trolls up near Koom Valley, and indeed with the Low King of the Dwarfs, Rhys Rhysson, in his caverns *under* Uberwald. This, as everybody knew, was politics.

Yes, politics. The secret glue that stopped the world falling into warfare. In the past there had been so much war, far too much, but as every schoolboy knew, or at least knew in those days when schoolboys actually read anything more demanding than a crisp packet, not so long ago a truly terrible war, the last war of Koom Valley, had *almost* happened, out of which the dwarfs and trolls had managed to achieve not exactly peace, but an understanding from which, hopefully, peace might evolve. There had been the shaking of hands, *important* hands, shaken fervently, and so there was hope, hope as fragile as a thought.

Indeed, thought Lord Vetinari as his coach rattled along towards Uberwald, in the rosy afterglow that had followed the famous Koom Valley Accord even goblins had finally been recognized as sapient creatures, to be metaphorically treated as brothers, although not necessarily as brothers-in-law. He reflected that, from a distance, the world might conceivably look to be at peace, a state of affairs that always ends in war, eventually.

He winced as his coach hit another most egregious bump on the road. He'd had the seats supplemented with extra mattress padding but simply nothing could turn the journey to Uberwald into anything other than a penance at every pothole, leading to fundamental discomfort. Progress had been very slow, although stops at clacks towers along the route had allowed his secretary, Drumknott, to collect the daily crossword puzzle without which Lord Vetinari considered the day incomplete.

There was a bang from outside.

'Good grief! Must we hit every pothole on the road, Drumknott?'

'I'm sorry, sir, but it appears that her ladyship cannot even now control the bandits around the Wilinus Pass. She has a culling every so often, but I'm afraid this is the least dangerous route.'

There was a shout outside, followed by more banging. Vetinari blew out his reading lamp moments before a ferocious-looking individual pushed the point of a crossbow bolt to the glass of the carriage, which was now in darkness, and said, 'Just you come out here with all your valuables or it'll be the worse for you, okay! No tricks now! We're assassins!'

Lord Vetinari calmly put down the book he had been reading, sighed and said to Drumknott, 'It appears, Drumknott, that we have been hijacked by *assassins*. Isn't that . . . nice.'

And now Drumknott had a little smile. 'Oh, yes, how nice, sir. You always like meeting assassins. I won't get in your way, sir.'

Vetinari pulled his cloak around him as he stepped out of the coach and said, 'There is no reason for violence, gentlemen. I will give you everything I have ...?

And it was no more than two minutes later that his lordship climbed back up into the coach and signalled for the driver to carry on as if nothing had happened.

After a while, and out of sheer curiosity, Drumknott said, 'What happened this time, my lord? I didn't hear anything.'

Beside him, Lord Vetinari said, 'Neither did they, Drumknott. Dear me, it's such a waste. One wonders why they don't learn to read. Then they'd recognize the crest on my coach, which would have enlightened them!'

As the coach got up to what might be considered an *erratic* kind of speed, and after some thought, Drumknott said, 'But your crest, sir, is black on a black background and it's a very dark night.'

'Ah, yes, Drumknott,' Lord Vetinari replied, with what passed as a smile. 'Do you know, I hadn't thought of that.'

There was something inevitable about Lady Margolotta's castle. As the great wooden doors slowly opened, every door hinge creaked. After all, there was such a thing as socially acceptable ambience. Indeed, what kind of vampire would live in a castle that didn't creak and groan on cue? The Igors wouldn't have it any other way, and now the resident Igor welcomed Lord Vetinari and his secretary into a cavernous hall with spiders' webs hanging pendulously from the ceiling. And there was a sense, only a sense, that down in the basement somewhere, something was screaming.

But of course, Vetinari reflected, here was a wonderful lady, who had made vampires understand that returning from the grave so often that you got dizzy was rather stupid and who somehow had persuaded them to at least tone down their nocturnal activities. Besides which, she had introduced coffee to Uberwald, apparently exchanging one terrifying craving for another.

Lady Margolotta was always short and to the point, as was the nature of the conversation that followed a splendid dinner a few days later. 'It is the grags. The grags again, yes, Havelock? After all this time! My vord, even vorse, just as you, my dear, prophesied. How could you have foreseen it?'

'Well, madam, Diamond King of Trolls asked me the very same thing, but all I can say is that it lies in the indefatigable nature of sapient creatures. In short, they can't all be satisfied at the same time. You thought the bunting and fireworks and handshakes and pledges after Koom Valley was signed and sealed was the end of it, yes? Personally, I have always considered this a mere interlude. In short, Margolotta, peace is what you have while incubating the next war. It is impossible to accommodate *everyone* and twice as impossible to please all the dwarfs. You see, when I'm talking to Diamond King of Trolls he is the mouthpiece of the trolls, he speaks for *all* the trolls. Sensible as they are, they leave it all to him when it comes to the politics. 'And then, on the other hand, we have yourself, dear lady: you speak for all your . . . folk in Bonk* and most agreements made with you are, well, quite agreeable . . . But the dwarfs, what a calamity. Just when you think you're talking to the leader of the dwarfs, some wildeyed grag will pop out on the landscape and suddenly all bets are off, all treaties instantly become null and void, and there is no possibility of trust! As you know, there is a "king" – a *dezka-knik*†, as they call him – in every mine on the Disc. How does one do business with people like this? Every dwarf his own inner tyrant.'

'Vell,' said Lady Margolotta, 'Rhys Rhysson is managing quite vell in the circumstances and ve in higher Uberwald...' now her ladyship almost whispered, 'are *very* much on the side of progress. But, yes, how can vun vin vunce and for all, that is vhat I vould like to know.'

His lordship set down his glass carefully and said, 'That, alas, is never totally possible. The stars change, people change, and all we can do is assist the future with care and thoughtful determination to see the world at peace, even if it means ushering some of its worst threats to an early grave.

'Although I'm bound to say that subtlety and careful interrogation of the things the world puts in front of us suggest to me that the Low King – whom, as protocol dictates, I called upon before coming here to meet you – is forming a plan right now; and when he makes his

^{*} Correctly pronounced Beyonk.

[†] Literal translation: 'chief mining engineer'.

play we will throw everything in to support him. He is taking a very big gamble on the future. He believes that the time is right, especially since Ankh-Morpork is now well known to have the largest dwarf community in the world.

'But I believe his people don't like too much modernity. I must admit, I can see vhy. Progress is such a vorrisome thing when one is trying to maintain peace in the vorld. So . . . unpredictable. Can I remind you, Havelock, that many, many years ago, an Ephebian philosopher built an engine that vas very powerful, scarily so. If those people had persevered with the engine powered by steam the nature of life now might have been very much different. Don't you find that vorryink? How can ve guide the future when von idiot can make a mechanism that might change *everything*?'

Lord Vetinari dribbled a last drop of brandy into his glass and said cheerfully, 'Madam, only a fool would try to stop the progress of the multitude. *Vox populi, vox deorum*, carefully shepherded by a thoughtful prince, of course. And so I take the view that when it's steam engine time steam engines will come.'

'And what do you think you're doing, dwarf?'

Young Magnus Magnusson didn't pay much attention at first to the senior dwarf whose face, in so far as it could be seen, was definitely grumpy, the kind of dwarf that had apparently never himself been young, and so he shrugged and said, 'No offence, O venerable one, but what I think I'm doing is walking along minding my own business in the hope that others would be minding their own. I hope you have no rat with that?'*

It is said that a soft answer turneth away wrath, but this assertion has a lot to do with hope and was now turning out to be patently inaccurate, since even a wellspoken and thoughtful soft answer could actually drive the wrong kind of person into a state of fury if wrath was what they had in mind, and that was the state the elderly dwarf was now enjoying.

'Why are you wearing your helmet backwards, young dwarf?'

Magnus was an easy-going dwarf and did the wrong thing, which was to be logical.

'Well, O venerable one, it's got my Scouting badge on it, you know. Scouting? Out in the fresh air? Not getting up to mischief and serving my community well?'

This litany of good intentions didn't seem to get Magnus any friends and his sense of peril began belatedly to function much faster. The old dwarf was really, really unhappy about him, and during this short exchange a few other dwarfs had sauntered over to them, looking at Magnus as if weighing him up for the fight.

It was Magnus's first time alone in the twin cities of Bonk and Schmaltzberg and he hadn't expected to be greeted like this. These dwarfs didn't look like the ones he had grown up with in Treacle Mine Road and he began to back away, saying hurriedly, 'I'm here to see

^{*} Humans might have said 'beef' at this point, but not many dwarfs have a taste for cow, whereas rat is perennially dependable.

my granny, right, if you don't mind, she's not very well and I've come all the way from Ankh-Morpork, hitching rides on carts and sleeping out every night in haystacks and barns. It's a long, long way—'

And then it all happened.

Magnus was a speedy runner, as befitted the Ankh-Morpork Rat Pack,* and as he ran he tried to figure out what it was that he had done wrong. After all, it had taken him for ever by various means to get to Uberwald, and he was a dwarf, and they were dwarfs and ...

It dawned on him that there had been something in the newspapers back home saying that there were still a few dwarf societies that would have nothing to do with any organization that included trolls, the traditional and visceral enemy. Well, there were certainly trolls in the pack back home and they were good sports, all of them, a bit slow mind you, but he had occasionally gone to tea with some of them and vice versa. Only now he remembered how occasionally old trolls and older dwarfs were upset for no other reason than that after hundreds of years of trying to kill one another

* Scouting for trolls, dwarfs and humans was brought in shortly after the Koom Valley Accord had been signed, on the suggestion of Lord Vetinari, to allow the young of the three dominant species to meet and hopefully get along together. Naturally the young of all species, when thrown together, instead of turning against one another would join forces against the real enemy, that is to say their parents, teachers and miscellaneous authority which was *so* old-fashioned. And up to a point, and amazingly, it had worked and that was Ankh-Morpork, wasn't it? Mostly, nobody cared what shape you were, although they might be very interested in how much money you had.

they, by means of one handshake, were supposed to have become friends.

Magnus had always understood that the Low City of the Low King was a dark place, and that was okay for dwarfs as dwarfs and darkness always got on well together, but here he sensed a deeper darkness. In this trying moment it seemed that here he had no friends apart from his grandmother, and it looked as though there was going to be a lot of trouble between him and the other side of town where she lived.

He was panting now but he could still hear the sounds of pursuit, even though he was leaving the deeper corridors and tunnels behind him and heading out of the underground city of Schmaltzberg, realizing he would have to come back another day ... or another way.

As he stopped briefly to get his breath back, a guard on the city gate stepped into his path with a certain greedy expression.

'And where do you think you're going in a hurry, Mister Ankh-Morpork? Back to the light with your troll friends, eh?'

The guard's spontoon knocked Magnus's feet from under him and then the kicking started in earnest. Magnus rolled to get out of the way and as a kind of reflex shouted, 'Tak does not want us to think of him, but he does want us to think!'

He groaned and spat out a tooth as he saw another dwarf coming towards him. To his dismay the newcomer looked middle-aged and well-to-do, which certainly meant that there would be no friendship here. But instead of administering a kicking, the older dwarf shouted in a voice like hammers, 'Listen to me, young dwarf, you must never let your guard down like this...'

The newcomer smacked his original assailant to the ground with commendable ferocity and a gloriously unnecessary display of violence and as the guard lay groaning he pulled Magnus upright.

'Well, you can run, kid, much better than most dwarfs I know, but a boy like you should know that Ankh-Morpork dwarfs are not in favour at the moment, at least not around these parts. To tell you the truth, I'm not that happy about them myself, but if there's a fight it must be a fair one.'

At that he kicked the stricken guard very hard and said, 'My name is Bashfull Bashfullsson. You, lad, better get yourself some micromail if you're going to come calling on your granny looking all Ankh-Morpork. And it is ashamed I am that my fellow dwarfs treat a young dwarf so badly just because of what he wears.' And the full stop to that rant was yet another blow to the recumbent guard.

'I'll hand it to you, lad, I really have never seen a dwarf that can run as fast as you were doing! My word, you can run, but it might now be time to learn how to hide.'

Magnus brushed himself down and stared at his saviour, saying, 'Bashfull Bashfullsson! But you're a legend!' And he took a step backwards saying, 'I've read all about you! You became a grag because you don't like Ankh-Morpork!' 'I may not, young dwarf, but I don't hold with killing in the darkness like those bastard deep-downers and delvers. I like a stand-up fight, me.'

Saying this, Bashfull Bashfullsson kicked the fallen guard heavily yet one more time with his enormous iron-clad boot.

And one of the most well-known and well-respected dwarfs in the world held out his hand to young Magnus, and said, 'Now let your talent take you to safety. As you said, Tak does not require us to think of him, but remember that he does require us to think and you might want a thought or two about adjusting your attire when you come back to visit your granny again. Besides, she might not appreciate Ankh-Morpork fashions. Nice to have met you, Mister Speedy, and now get your sorry arse out of here – I might not be around next time.'

Far away and turnwise of Uberwald, Sir Harry King was pondering on the business of the day. He was widely known as the King of the Golden River because of the fortune he had made minding other people's business.

Harry was normally a cheerful man with a good digestion, but not today. He was also a loving husband, doting on Euphemia, his wife of many years, but alas, not today. And Harry was a good employer, but also not today, because today his stomach was giving him gyp by means of the halibut to which the phrase *long time no see* could not happily be applied. He hadn't liked the look of it when it was on his plate,

halibut being a fish which tends to look back at you reproachfully, and for the last few hours he had envisaged the damn thing looking at the insides of his stomach.

The problem was, he thought, that Euphemia still remembered the good old days when they were poor as church mice and therefore necessarily frugal with their money, and such habits bite to the bone, very much like the inadvisably digested fish which had been swimming somewhere in the vicinity of Harry's bowels and threatening to swim a lot further.

Regrettably, Harry was a man brought up to eat everything that was put in front of him and that meant everything eaten up. When he had finally exited from the privy, where he fancied the damn fish had been watching him from the bowl, he had pulled the chain with such vehemence that it broke, causing the woman whom he sometimes called the Duchess to have words with him. And since words tend to lead to more words. nasty, spiteful little words flew on both sides, words that if Harry could help it would be flung back to the wretched fish which had started it all. But instead he and his wife had had what they had known all of their lives as an up-and-downer. And, of course, Effie, born in the next-door gutter to Harry, could give at least as good as she got in such situations, especially when armed with a quite valuable and decorative jug. Effie had a voice on her that at times could make a barrow boy blush, and she had called Harry the 'King of Shit', causing him to do what he never, ever wanted to do, which was to raise his hand in anger, especially since the jug with which his wife was now armed was also quite a heavy one.*

Of course it would blow over, it always did, and genuine marital harmony would drift into its accustomed place in the household. But nevertheless, all afternoon Sir Harry prowled around his compound like an old lion. *King of Shit*, well, yes, and because of him the streets were clean, or at least considerably cleaner than they had been before what might be called the Harry King dynasty. He mused, as he wandered, that his work was all about those unimaginable things that people wanted to leave behind them. And therefore there wasn't much for him on the top table of society. Oh, yes, he was *Sir* Harry, but he knew that Effie really wished they could leave behind the whole stinking business.

'After all,' she said, 'you're as rich as Creosote as it is. Can't you find something else to do – something that people actually *want* rather than need?'

Generally speaking, Harry was not very good at philosophy. He was proud of what he had achieved, but a tiny part of him was agreeing with Effie that surely there was something better for him than chasing the pure[†] and making certain the unreliable septic tanks of the city didn't overflow. Somebody had to do it, of course – and it wasn't as if it was actually Harry himself, not for many years, since he paid the gongfermors,

* Besides being from the McSweeney dynasty and therefore frighteningly expensive. Although, he thought, when he looked at the porcelain shards on the floor, they didn't look *that* expensive.*

 \dagger A term, technically speaking, for dog muck, much prized by the tanneries.

dunnykin divers and now a whole army of goblins as well to do the dirty work. Still, what he needed now, he thought, was an occupation that was manly without being despicable.

Absent-mindedly, he sacked his latest lawyer, a dwarf who had been caught with his nasty little fingers in the till, and managed to do it without actually throwing the little bugger all the way down the stairs.

Unusually despondent, Harry prowled on, seeking to calm his nerves. At the edge of his compound he sniffed the air, so far as he dared. There was a wind blowing from the hub and he turned to face it and caught a tantalizing smell: a manly smell, a smell with a purpose, a smell that wanted to take him places, and it said *promise*.

The relationship between Moist von Lipwig and Adora Belle Dearheart was firm and happy, quite possibly because they didn't see each other for substantial periods of time, since she was immersed in the running of the Grand Trunk and he was dealing with the Bank, the Post Office and the Mint. Despite what Lord Vetinari *thought*, Moist *did* have proper work to do at these institutions and that was, in his own mind, called holding it all together. Things worked, in fact they worked very well, but they worked, Moist thought, because he was always seen in the Bank or the Mint or the Post Office being Mister Bank, Mister Post Office and Mister Mint.

He chatted to people, talked to them about their work, asked how their wives and husbands were,

having memorized the names of all the family members of the person he was talking to. It was a knack, a wonderful knack, and it worked a treat. You took an interest in everybody and they took an interest in their work and it was vitally important that he was always around to keep the magic flowing.

As for Adora Belle, the clacks were in her bones, it was her legacy and woe betide anyone who got between it and her,* even if that anyone *was* her husband.

Somehow the system worked as hard as they did and so they could afford Crossly, the butler, and Mrs Crossly too.† Their house in Scoone Avenue had a gardener too, who appeared to come with the territory. Crisp‡ was also a decent handyman and quite talkative, although Moist never understood a word he said. He came from somewhere in the Shires and spoke using a vocabulary that was theoretically Morporkian, but in reality had lots of straw in it with the syllable 'ahh' working hard in every conversation. He made cider in his shed at the bottom of the garden, utilizing the apple trees that the previous owner had carefully cherished. He also, as a matter of course, cleaned the windows,

* Unless they were a golem. During the dark days when the family clacks company had been usurped by *businessmen*, Adora Belle had diverted her energies into golem emancipation. She was still involved with the Golem Trust, but the pace of change in Ankh-Morpork, she was pleased to notice, meant that the golems were quite happily trusting themselves. † Adora Belle was, as even she knew, a creatively bad cook, mostly because she thought cookery a waste of time for a woman with even half a mind; and since Moist took pretty much the same stance when it came to manual labour, the arrangement seemed to suit all parties. ‡ Which was his *only* name. and with the help of an enormous box full of every type of hammer, saw, drill, screwdriver and chisel, bags of nails and a number of other items that Moist could not recognize, and moreover did not wish to, made Moist's life easy whilst making Crisp possibly the richest handyman in the neighbourhood.

Moist von Lipwig had done some heavy work once and couldn't see any future in it, but he could look at it for hours, provided other people were doing it, of course, and clearly some of them liked what they were doing, and so he shrugged and felt happy that Crisp was happy being a handyman whilst Moist was happy not picking up anything that was heavier than a glass. After all, his work was unseen and depended on words, which were fortunately not very heavy and didn't need grease. In his career as a crook they had served him well and now he felt somewhat smug at using them to the benefit of the citizenry.

There was a difference between a banker and a crook, there really was, and although it was very, very teeny Moist felt that he should point out that it did exist and, besides, Lord Vetinari always had his eye on him.

So everybody was happy and Moist went to work in very clean clothes and with a very clean conscience.

Having washed and dressed in said clothes in his private bathroom,* Moist went to see his wife, practising his smile on the way and endeavouring to look cheerful. You never knew with Adora Belle.† She could

^{*} Separate bathrooms of course being the key to any happy marriage.

^{† &#}x27;Spike' to her fond husband. Her brother had called her Killer, but he meant it in a nice way.

be quite acerbic. After all, she ran the whole clacks system these days.

She also liked goblins, which was why there were some living behind the wainscoting of the house and others in the roof. They smelled, but the smell wasn't, once you got over the shock, all that bad. The compensation was that the goblins had taken the clacks into their scrawny hearts, one and all. The wheels and levers fascinated them. Moist knew that generally goblins hid out in caves and insalubrious places that humans didn't bother about, but now, when suddenly they were being treated as people, they had found their element which was generally the sky. They could scramble up a clacks tower faster than any man could run, and the rattling, back-and-forth clanking and relentlessly busy machinery of the clacks had them in its grip.

Already, after only a few months in the city, the goblins had improved the efficiency of the clacks across the Sto Plains threefold. They were creatures of darkness, but their perception of light was remarkable. There was a whole malignity* of goblins up on the roof, but if you wanted your clacks to fly fast, you didn't use the term out loud. The villains of the storybooks had found their place in society, at last. All it needed was technology.

When Dick Simnel walked into Sir Harry King's compound he wasn't at all certain how you spoke to grand folk. Nevertheless, he managed to talk his way through

^{*} The official collective noun for a bunch of goblins.

the people in the front office, who had a rather jaundiced look and appeared to consider it their duty to ensure that no one should ever get to see Sir Harry King, especially greasy-looking young men with wild eyes trying hard to look respectable despite their extremely old clothing which, these gatekeepers thought, needed something, possibly a bonfire. However, Dick had the persistence of a wasp and the sharpness of a razor blade, and so eventually he ended up deposited in front of the big man's desk like a supplicant.

Harry, red-faced and impatient, looked over his desk and said to him, 'Lad, time is money and I'm a busy man. You told Nancy down on Reception that you've got something I might like. Now stop fidgeting and look me in the face square like. If you're another chancer wanting to bamboozle me I'll have you down the Effing stairs* before you know it.'

Dick stared soundlessly at Harry for a moment, then said, 'Mister Sir King, I've made a machine that can carry people and goods just about everywhere and it don't need 'orses and it's run on water 'n' coal. It's my machine, I built it and I can make it even better if you can see your way clear to advance me some investment.'

Harry King reached into his pocket and pulled out a heavy gold watch. Dick couldn't help but notice the famous gold rings that he had been told Sir Harry always wore, possibly as an ensemble of socially

^{*} The wonderfully colourful oak wood of the Effing Forest was much in demand for high-class joinery.

acceptable and extremely valuable knuckledusters.

'Did I hear you right? It's Mister Simnel, isn't it? I'll give you five minutes to catch my fancy and if I think you're just another thimblerigger on the slant you'll go out of here rather more quickly than you came in.'

'My old mother always said seeing is believing, Mister King, and so I've come prepared. If you can give me some time to get t'lads and t' 'orses...' Dick coughed and continued, 'I have to tell you, Mister Sir Harry, I took the liberty of parking them right outside your compound, 'cos I talked to people and they said that if Harry King wants something to start happening it 'as to 'appen fast.' He hesitated. Was that a glint in Harry's eye?

'Well,' the magnate grumbled rather theatrically. 'Young man, even though time is money, talk is cheap. I'll come out in five minutes and you'd better have something solid to show me.'

'Thank you, Sir King, that's very kind of you, sir, but we'll have to get t'boiler warmed up first, sir, and so we'll have 'er throbbing in no more than two hours, sir.'

Harry King took his cigar out of his mouth and said, 'What?! Throbbing?'

Dick smiled nervously. 'You'll see, sir, you'll see.'

Very shortly afterwards, and just in time, smoke and steam enveloped the compound and Harry King saw and, indeed, was amazed.

And Harry King really *was* amazed. There was something insect-like about the metallic contraption, bits of which were spinning incessantly while the whole thing was shrouded in a cloud of smoke and steam of its own making. Harry King saw purpose personified. Purpose, moreover, that would be unlikely ever to ask for a day off for its granny's funeral.

Over the noise he shouted, 'What did you say this thing is called, my lad?'

'Iron Girder, sir. An engine that uses the expansion or rapid condensation of steam to generate power. Power for locomotion – that is to say, movement, sir. And if you'd allow us to lay down her rails, sir, we can really show you what she can do.'

'Rails?'

'Aye, sir. She runs on an iron road, you'll see.'

Suddenly there was the sound of a banshee on heat as Wally moved a lever.

'Sorry, sir, you 'ave to let t'steam out. It's all about 'arnessing t'steam. You heard her singing, sir, she wants motion, power is going to waste while she's just sitting here. Give me time and allow me to put a test track around your compound. We'll have 'er running very soon, I promise you.'

Harry was uncharacteristically silent. The thrumming of the machine was like a kind of spell. Again, the metal voice of steam rang out over the compound like a lost soul and he found himself unable to leave. Harry wasn't a man for introspection and all that rubbish, but he thought that this, well, *this* was something worth a closer look. And then he noticed the faces of the crowd around the compound, the goblins climbing up to gawp at this new raging devil which was nevertheless under the control of two lads in flat caps and very little to speak of in regard to teeth.

Getting his thoughts lined up properly, Harry turned to Dick Simnel and said, 'Mister Simnel, I'll give you two days, no more. You have your chance, mister, don't waste it. I am, as I say, a busy man. Two days to show me something that astounds me. Go on.'

Dwarfs and men sat and listened intently to the old boy sitting in the corner of the Treacle Miner*, human, possibly, but with a beard any respectable dwarf would have coveted, who had decided to share with them his knowledge of the treacle-mining world.

'Gather round, lads, fill my pot and I'll tell you a tale that's dark and sticky.' He looked meaningfully at his empty tankard and there was laughter as it was replaced by some well-wisher and, as he sipped his ale, he began his tale.

Years back, unexpected deep treacle reserves had been discovered under Ankh-Morpork, fathoms down, and as every treacle miner knew, the lower the treacle, the better the texture and therefore the better the taste. In truth, and in Ankh-Morpork at least, there was very little friction between dwarf clans on this matter, and the question of who would be allowed to mine the discovery was amiably dealt with by the old boys, dwarf and human.

Everyone conceded that when it came to working underground there was nothing like the dwarfs, but, to the dismay of the older miners, very few of the dwarf

^{*} Known by habitués as the Sticky Head.

youngsters of Ankh-Morpork were at all interested in mining under any circumstances. And so the grizzled old boys welcomed any local miners of any species to work under the venerable streets of Ankh-Morpork, for the sheer pleasure of seeing treacle being properly produced again, and the miners, whoever they were, went about their sticky business in the search for the deep shimmering treacle.

And something happened, somewhere up near the Shires, where the dwarf miners had been working a reasonable seam, part of which was under land which at that time belonged to the Low King of the Dwarfs. In those not too distant days political relationships between human and dwarf were somewhat nervy.

On the day when things came to a head there had been a sudden fall of dark toffee, extremely precious and very unusual, but feared by every treacle miner because of its tendency to spontaneously collapse into the tunnels. According to the eyewitnesses, both humans and dwarfs were mining underground while politicians argued on both sides of the political divide. And this fall was mostly on the human side of the seam, with many men trapped in a deluge of unrelenting stickiness.

He hesitated for a moment and said, 'Or it might have been the dwarf side, now I come to think about it...' He looked embarrassed, but continued. 'Well, it doesn't really matter now who they were, it was a long time ago anyway. The miners working the seam from the other side of the fall heard that there were many miners down there, trapped and drowning in refined sugar derivatives, and said, "Come on, lads, get the gear together and let's get them out of there."

The old boy hesitated a further moment, possibly for effect, and said, 'But of course that meant that they had to enter territory that required going through two bloody security barriers manned by armed guards. Guards, moreover, who were not that bothered about miners and were certainly not going to let any of the enemy down into *their* sovereign soil.'

Another significant pause, then the tale raced on. All the miners had piled up against the barriers. Someone said, 'We can't tackle them, they've got weapons!' and they looked at one another in what is known as wild surmise, and then another voice yelled, 'But so have we, when you look at it the right way, and ours are bigger!' And the speaker waved his enormous fist and said, 'And we're mining every day, not standing around and looking smart.'

And so as one dwarf, or possibly human, they rushed the barricade and the guards, realizing they were failing to frighten people, ran for cover as the miners with the picks and shovels came down on them at speed and sixty miners were saved from a very sticky situation on both sides of the seam.

Nothing official happened afterwards because official dom didn't want any part of the shame of it.

The old boy looked around and glowed as if he himself had been one of those miners and, quite possibly, he might have been, and his tankard was topped up once again and he said wistfully, 'Of course, that was the old days. I wish it still was.' * * *

It was just short of the end of the second day when Simnel and his lads had Iron Girder chuffing slowly and purposefully along a short circular track in Harry's compound.

And Harry couldn't help noticing that the look of the engine had changed and it now seemed somehow ... smoother than before. In fact, he thought, he had been ready to say *sleek*, though it was hard to think of what looked like fifty tons of steel as sleek, but yes, he thought, why not? It shouldn't be beautiful, but *she* was. Stuttering, stinking, growling, smoking, but so very beautiful.

Dick said cheerfully, 'We're taking it slow, Mister Harry. We need to put down some *real* ballast before we can let 'er rip, but she grows on yer, don't you think? And when we've built 'er up, and added on wagons and suchlike there'll be no stoppin' 'er.'

And there it was again. It really ought to be a he, Harry mused, but somehow the 'she' stuck relentlessly.

And then Harry's rather crumpled brow furrowed even further. This young lad clearly knows his stuff, he thought, and he said his machine could carry people and goods . . . but who'd want to ride on this clanking great monster?

On the other hand, the compound smelled of steam and coal and hot grease – manly, healthy smells . . . Yes, he'd give them that little bit longer. Perhaps another week. After all, coal wasn't expensive and he wasn't paying them anything. Harry King realized he was feeling unusually happy. Yes, they could have a little more time. And the smell was good, unlike those he and Effie had put up with over the years. Oh, yes, they could definitely have their time, though he'd need to keep the lads on their toes. He looked up and the clacks towers blinked relentlessly and Harry King saw the future.

The wind above the clacks towers was blowing from the hub, cool and purposeful, and Adora Belle Dearheart fancied she could see the edge of the world from here. She cherished moments like this. They reminded her of when she was young, really young, when her mother would hang her cradle from the top of a tower while she was coding, leaving her daughter cheerfully making baby noises several hundred feet above the ground. In fact, her mother said her very first word was 'checksum'.

And now she could see, clearly out of its mists, the mountain Cori Celesti glittering like a great green icicle. She sang as she tightened up the spinners on the upper gallery. She was out of the office, as far from it as was possible, and it felt good. After all, she could even see the office from up here. In fact, she could probably see *everybody*'s office from here, but right now she sorted out the delicate little mechanisms and savoured a world where she could reach out and touch the sun, well, metaphorically at least. This reverie was broken by one of the tower's goblins.

'I am bringing twenty spinners and a flask of coffee, very hygienic, I cleaned the mug myself with my own hand. Me. Of the Twilight the Darkness,' he said proudly. Adora Belle looked down at a face that would take a frantic battalion of mothers to love, but nevertheless she smiled and said, 'Thanks, mister. I must say you've really got acclimatized for somebody who has spent most of their life in a cave. I can't believe you don't even worry about heights, that never ceases to amaze me. And thanks again, it really is good coffee and still warm, too.'

Of the Twilight the Darkness shrugged as only a goblin could shrug. The effect was rather like a parcel of snakes dancing.

'Missus Boss, goblins no stranger to acclimatize. Don't acclimatize, don't live! And anyway, things going well down there, no problems. Goblins got respeck! And how is Mister Slightly Damp?'

'Moist is fine, my friend, and surely you know my husband doesn't like the name you goblins have given him. He thinks you're doing it on purpose.'

'You want that we stop doing it?'

'Oh, no! It teaches him a lesson in humility. I think he needs to go to university on that score.'

The goblin grinned in the way of a conspirator, and he could see Adora Belle trying not to laugh, while overhead the clacks continued sending its messages to the world.

Adora Belle could *almost* read the messages simply by watching the towers, but you had to be very, very fast; and the goblins were even faster than that. And who ever would have thought their eyesight was so discerning? Using the new augmented colour shutter boxes after dark, most human clacks spotters could separate about four or five or maybe even six colours on a very good clear night, but who could have imagined that goblins, fresh out of their caves, would be uncannily able even to identify puce as opposed to pink, while most humans didn't have a clue what a damn puce was if they saw it?

Adora Belle glanced at Of the Twilight the Darkness and once again acknowledged to herself that goblins were the reason why clacks traffic was so much faster, more accurate and streamlined than ever before. And yet how could she reward them for the increased efficiency? Sometimes the goblins never even bothered to take their pay. They liked rats, of which there was never a shortage, but because she was indeed the boss* she felt it incumbent on her to persuade the little nerds that there were, indeed, many other things you could be doing apart from coding and deciphering clacks messages. She almost shivered. They actively, obsessively liked to work, all day and all night if possible.

She knew if the name on the door said 'Boss' then in theory she had to think about their welfare, but they weren't interested in their own welfare. What they wanted to do was code and decipher, pausing only when the lady troll with the rat trolley came round. Honestly! They liked their work and not just liked it, but lived it. How many bosses had had to go all around the workplace telling people they really had to stop

^{*} If you could give that name to somebody who had to deal every day with forms to sign, go to far too many meetings *about* meetings and handle the most petty of correspondence.

working now and go home? But then they didn't go home, they wanted to stay up in their clacks towers, and in the small hours of the night chat by clacks to goblins elsewhere. They would rather chatter than eat, it seemed, and even slept on the tower, dragging in little straw beds for when they were forced by nature to take a nap.

Adora Belle had insisted to the trustees that there should be a foundation set up, against the day when goblins and their children might want to move further into society. So a scant while after the remarkable musical talents of Tears of the Mushroom had been so spectacularly unveiled to Ankh-Morpork high society, the goblins had become people, strange people, yes, but people nevertheless. Of course, there was the smell, but you couldn't have everything.

Novelty went around Ankh-Morpork just like an embarrassing disease, thought Sir Harry King the following afternoon as he looked down on to the compound where people were peering through the gates and fencing in a great susurration of speculation. Harry knew his fellow citizens from the bottom up, as it were, willing slaves to novelty and the exotic, rubberneckers all of them. The whole crowd were turning their heads as one to keep track of Iron Girder, like a flock of starlings, and all the time Iron Girder was chuffing away with Dick waving from the footplate, the air still full of the smuts and smells. And yet, he thought, it's all approval. No one's disagreeing, no one's frightened. A beast from nowhere. A fiery dragon, all smoke and cinders, has appeared among them and they hold up their children to look at it, waving as it goes past.

What strange magic—? He corrected himself; what strange *mechanics* could have achieved this? There was the beast and they were loving it.

I'll have to get familiar with these words, Harry thought as he left his office: 'footplate', 'boiler', 'reciprocal', 'molybdenum disulphide',* and all the tire-some but fascinating language of steam.

Having noticed that Harry was watching them, Dick Simnel allowed Iron Girder to slow down gently until, with an almost imperceptible bump, she came to a halt. Dick jumped off the footplate and strolled towards him, and Harry saw a triumphant look in his eye.

Harry said, 'Well done, lad, but be careful, be very, *very* careful. Be careful of everything right now. I've been watching the faces of them people with their noses pressed up against my fence, their little faces all corrugated, as it were. They're fascinated, and fascinated people spend money.

'The most important thing in business is to work out who gets that cash and it's like this, my boy, it's a jungle out there and I'm more than a multi-millionaire, much more. I know that while happy handshakes are very pleasing and friendly, when it comes to business you can't do without bloody lawyers because in this jungle I'm a gorilla! It's best you tell me the name of yours and

* This black crystalline compound was widely used by troll women as an anti-ageing cream. Dick Simnel had been thorough in his research and it was, apparently, a very efficient lubricant.