

## Perpetual Motion

(Tuesday)

“I’m Tom Bodett for Motel 6, and we’ll leave the light on for you,” Max imitated as his younger brother maneuvered the empty rig into the parking lot of the motel. Then he repeated it each time they passed the sign out front. Paxton had chosen this place only because there was a Cracker Barrel next door. And since they had some time before they needed to get back on the road, he thought it might be a good time to let Max take an unhurried shower and sleep in a real bed. Max seemed pretty indifferent to the suggestion. But then excitement, appreciation and indifference often looked the same when it came to his brother.

The next morning, Max had agreed to order his own breakfast. He’d repeated “fluffy pancakes and crispy hash browns” three times to the patient young waitress who had a brown smear across one of her green eyes similar to their mom. Max didn’t have any complaints about the meal which was no better or worse than the others and Paxton wondered if maybe his brother wasn’t sweet on more than just the thick syrup. Back in the motel room, they’d done aerobics after Max reminded him twice that aerobics was on Mondays, Wednesdays and Fridays.

“The only days that mattered on the road were pickup and delivery days,” Paxton had pointlessly responded. There were consecutive *Star Trek* episodes on different channels which they’d watched right up until it was time to leave for the museum.

They parked the separated tractor beside a small cluster of three television vans. Apparently, Lock Haven didn’t have much in the way of real news to report. Max had paused and was watching an attractive young lady as she was being filmed in front of the red-brick building.

“This is Paige Reilly reporting from Lock Haven Pennsylvania out front of The Museum of Unworkable Devices,” she began with a large round mike blocking her lips but not her adorable dimples. “This year’s *What’s New at the Muse* event features several new exhibits including a machine that produces work without the input of any energy.”

“There’s no such thing as a free lunch,” Max mumbled but loud enough for Paige to hear.

“Cut. Cut,” the cameraman called out when his reporter paused.

Paige’s dark eyes looked apologetically at the man who’d allowed his camera to tilt down. “I’m sorry. I just got distracted. Let’s do it again.” The wind had picked up and was blowing her vivid orange hair across her freckled face.

“It’s too bright out here. We should find a place inside,” the stout cameraman with thick arms covered in tattoos said as he wound up the cable that was coiled near his feet.

The reporter sighed as she unsuccessfully tried to gather more of her hair beneath her wide head band. “I’ll try to find a backdrop inside while you pack up the gear. The contest starts in fifteen minutes,” she reminded him.

“I’ll make it. We can shoot the intro afterwards if we need to.”

She was lightly tapping her head with the soft round end of the mike as she walked by the brothers. “Sorry for interrupting you,” Paxton offered.

She smiled and he noticed she had a cute little gap between her front teeth.

“It’s okay. The sun makes my cheeks too red anyway,” she chirpily replied.

Max and Paxton then followed several steps behind and caught up with her again as she stood reading the building key in the lobby.

“The museum is on the third floor,” Paxton told her as they passed on their way to the elevator.

“Oh thanks.”

When the elevator door didn't close, Paxton looked down to see that Max was pressing the open button. "Shall we hold the elevator for you?" he called back to her.

"I need to wait on Al, my cameraman," she politely responded.

After the door closed, Paxton looked over at his brother who was staring at the lit button for the third floor. "That was nice of you to hold the door for that lady."

"Max is a gentleman."

Paxton laughed. "I guess it had nothing to do with how pretty she was," he teased as the elevator started to ascend.

"Two per cent of the population has red hair, two percent," Max revealed.

"Is that right? Hers sure was striking didn't you think?"

"She smelled like cinnamon and vanilla."

"That's very specific. Is Max crushing on Paige the Reporter?" he squeezed in just as the doors opened to a gathered crowd. Paxton knew his brother didn't like crowds. So he quickly led him to an empty area back away from the commotion.

Paxton hadn't given this event much thought. But if he had, he wouldn't have guessed it would have generated this much interest. There were several dozen people, most of them students, standing around chatting in the space between the elevator landing and a balloon arch. Their professors had likely let them out of class to attend. Another reporter was interviewing a young man dressed in a Ben Franklin costume which Paxton guessed based upon the iconic round glasses and because he was holding a miniature kite. Several other students were also dressed up.

"Hey look. Ben Franklin decided to come," Paxton quietly joked to Max.

"Ben Franklin died in 1790," Max corrected him.

"It was sarcasm. You know, because we're in a museum of unworkable devices and he invented things that actually worked."

"Ben Franking invented swim fins, the long arm, Frank-Frank-Franklin Stove, bi-bifocals and the lightning rod. He was also an author, printer, politician..."

"Never mind," Paxton mumbled.

Just then the elevator doors opened and Al turned sideways so he and his camera could fit simultaneously through the opening. A half-dozen visitors filed out after him and Paxton found himself on his tiptoes searching through them. It wasn't until Al bent over to set a large carrying case which looked small in his hand on the ground did her red hair appear.

*She was behind him the whole time*, he smirked. Then he considered what an odd pair they were especially when they were side-by-side. He was this colossal dark Samoan and she looked like a delicate porcelain doll. He could see why Max was smitten with her.

"This is Paige Reilly reporting from Lock Haven Pennsylvania inside *The Museum of Unworkable Devices*," she repeated and he found himself staring at her thin lips as she talked. "This year's *What's New at the Muse* event features several fresh exhibits including a machine that produces work without the input of energy. So how can that work you might ask since we all know from Newton's First Law of Thermodynamics that energy can't be created from nothing. Or as some might say, there's no such thing as a free lunch," she said as she subtly glanced over at Max and winked. "Well hopefully the university's finest scientific minds will be able to tell us. Because the first to solve that mystery will receive a \$1,000 scholarship."

Al briefly panned the camera across the crowd then ended up back on Paige.

"Apparently, we are about to start. So let's listen in," she concluded then ducked out of the way.

They couldn't see him, but they could hear Professor Tyndall's voice from the front of the crowd. "Welcome faculty, students, supporters and nutty science geeks to our annual *What's New at the Muse* event. This year we have an entirely new gallery of imaginative impossibilities for you to explore. And of course, our headliner exhibit that arrived just yesterday is the original Redheffer's infamous Perpetual Motion Machine which all of our guests are invited to closely examine. For several months in 1812, curious Philadelphians paid money to witness what they thought was a scientific breakthrough with the potential to transform the world. Unfortunately, they were deceived. Will you be deceived too? Or can you solve the mystery?

"We have a reception area set up in the Physics Gallery with punch and snacks. And that's where you are encouraged to present your theory on how this machine actually works to our panel of esteemed judges. We hope that you enjoy your visit with us today."

The professor then proudly watched as the clapping subsided and the anxious crowd started to shuffle by him beneath the balloon arch. Once the path was clear, Max and Paxton approached him.

"Max. I'm so happy you made it."

"Say hello to Professor Tyndall," Paxton reminded his brother.

"Hello Professor Tyndall."

"So you obviously got it together in time," Paxton surmised.

"They were conducting the final operational checks while I was giving my remarks," he whispered.

"Wow. That's cutting it close."

"Too close for comfort," the professor agreed. "It's set up in our *New Acquisitions Gallery*. Please have Max take a look."

"We will."

"Well, I must mingle before assuming my responsibilities as one of the judges. Don't wait too long to check out the device. My students have the additional incentive of getting extra credit if they figure it out first."

"I guess we'll go there now then."

The professor smiled then departed. Max had begun to follow Paxton into the next gallery until his brother grabbed him by the arm. "Do you need to go to the bathroom first?" he asked while he watched a different reporter with slicked-back hair and a tweed sports coat with elbow patches trolling toward Paige. The guy looked like a cross between a Mafia hitman and an adult movie star.

"No thank you."

"Are you sure?" Paxton asked again as he unconsciously led his brother toward the bathroom which also happened to be closer to the reporters.

"Max is sure," he reiterated.

Paxton was peeking through a glass display of a belt connecting two pulleys with hinged weights attached to both sides as the opportunistic reporter made his move.

"You're not from around here," he initiated.

Paige stopped reading the description on a nearby display.

"Oh no. I freelance."

"This one's interesting don't you think?" Paxton asked his brother with his attention fixed beyond the display.

"So, what brings you to Lock Haven? Certainly not our quaint little museum," the reporter with a Hollywood smile further engaged.

“I come every year.”

“Really?”

“Really. I’m a bit of a science geek I’m afraid.”

“I would have never guessed. So how does freelance reporting work?”

“I basically find stories that interest me and that I think will interest others. Then I make a tape and sell it to any news station that either can’t afford to pay their reporters to travel or that have some extra time to fill.”

“You must travel a lot.”

“Quite a bit.” Then she abruptly turned toward her cameraman. “Did you need a hand with that *finoiter* line Big Al?”

The giant man looked away from the take he’d been reviewing. “As a matter of fact, I do,” he said as he stood from his kneeling position dwarfing the determined reporter.

“Well, I’d best be moving on. My station wants some footage of this Perfect Motion Device.”

“Perpetual Motion,” she corrected him.

“Whatever.” He turned but then paused. “There’s a bar that a lot of the local reporters hang out at downtown.”

“Aleki and I have plans tonight,” she insinuated.

“Oh,” he said then finally walked away with his tail between his legs.

“Let’s go,” Paxton said to his brother whose nose was nearly pressed against the glass as his eyes darted back and forth between the text and a mock-up of four large balloons lifting a segment of a bridge.

“Max is reading,” he complained.

“Well finish reading,” Paxton sniped as he looked down and read the title Helium Crane. *They just didn’t seem like a couple*, he reconsidered. *Maybe she was just using the large scary man as a shield – a very effective one at that. She probably had to deal with unwanted advances all the time.* Not that any of that mattered because she was definitely out of his league.

“How’s this supposed to work?” he reengaged his brother.

Max stepped back from the glass. “Helium is light-lighter than air. The balloons lift the bridge into the sky then lower it into place.”

“But it doesn’t work, right?”

“Lift capacity of 1,000 cubic feet of helium is sixty-five pounds at sea level. Steel bridge weighs one-hundred tons which is two-hundred, two-hun-hundred thousand pounds, fif-fifty-thousand pounds per balloon. Diameter of a balloon to lift fifty-thousand pounds would have to be,” he paused and looked away. “One hundred and fifteen-fifteen feet if the balloon weighed nothing.”

“Okay. Okay. I get it. The balloons would have to be way too big to be practical,” Paxton understood.

Max nodded.

“Why don’t we go check out the device we delivered and maybe you can put that brain of yours to good use figuring out how it works. If you do, we can collect a thousand bucks.”

“Thousand-dollar scholarship,” Max corrected his brother.

“You’re so smart. Maybe you should go to college,” Paxton unthinkingly said as they proceeded into the remainder of the museum.

“Max can go to college,” he mumbled.

“That’s it?” Paxton questioned as they looked over and between a captivated group that was crowded around the assemblage of the parts they’d delivered. A four-sided square frame stabilized against a wall held a center beam from which a pendulum hung. Two sharply sloped ramps were mounted on a wheel above a single horizontal gear. Then atop each ramp was a wedged weight that pushed on a horizontal rod that appeared to drive the gears.

Max patiently stared at what he could see of the machine as others made their way around the three accessible sides looking for clues. As the people in front of him moved away, Max took a step forward then squatted so that his eyes were level with the horizontal gear. Then he retrieved his glasses from his fanny pack and leaned forward until his chest was against the rope barrier.

“Be careful,” Paxton warned his brother.

Max then leaned back on his heels then walked over to the wall and placed his hand on the surface.

“Did you figure something out?”

Max stepped back from the crowd then nodded.

“What is it?”

Max briefly glanced over at an older teenage boy who was disinterestedly standing nearby reading a comic book. Then he held up both hands, made a peace sign with each which he then turned ninety-degrees until his fingertips nearly touched.

“The gears are worn on the wrong side, wrong side,” he explained as he pressed the two extended fingers of his right hand down on one side of the two fingers from his left.

“What do you mean?”

“The shaft should wear, it should wear on the side where the gear teeth touch. These are worn on the wrong side,” he continued this time moving his right fingers to the opposite side and pressing up instead.

“Unless it is being driven by something else,” Paxton grasped. “What then?”

“Max hears something.”

“Where? Behind the wall?”

Max nodded.

“It’s probably just the air conditioner.”

“A bike.”

“A bike? Why would there be a bike in the building?”

Max walked back over and leaned his ear against the wall. “The bike drives a shaft below the floor that connects to the gear from the bottom instead of the top.”

Paxton pressed his hand against the wall and could indeed feel a soft vibration. “That’s amazing Good Buddy. You did it,” he said loud enough for others to hear. A few by-standers began to move in their direction. Soon they were surrounded enough that they didn’t see the teen reading the comic book slip away.

“How does it work?” someone in the gathering finally asked.

Max repeated his explanation and despite his outward indifference, Paxton could tell his brother was reveling in the attention.

“Let’s go tell the professor,” another by-stander suggested while patting Max on the back. Max hunched his shoulders and shrugged away from the contact but then willingly followed along in the center of the gaggle.

“You’re going to get the scholarship,” someone loudly announced from the rear.

“Max can go to college,” he mumbled but no one could hear him in the excitement.

Just as the group filed into the Physics Gallery, Professor Tyndall stood. "We have a winner," he announced to the collective moans of the students surrounding Max.

The others continued in disbelief toward the judge's desk as Max stopped in his tracks. Standing beside the professor was the eavesdropping teenager. Paxton knew immediately what had happened. He looked at Max to see if he had figured that out too. Max's head hung down which wasn't unusual except that his cheeks were flush as they did when he was upset.

"Max solved the mystery," he muttered.

"I know Good Buddy. But that kid must have solved it too. And he got to the judges first."

"Max solved the mystery," he said louder this time and a few of the students that heard him turned around and stared.

"What's your name young fellow?" Professor Tyndall asked but what was happening in the front of the room was quickly being overshadowed by the escalating disruption toward the back of the room.

"Max solved the mystery. Max solved the mystery," he repeated and each time his voice was louder and more frantic.

"It's alright Max. Please calm down," Paxton pleaded with him.

"Max won the scholarship. Max can go to college. Max solved the mystery," he screeched and the crowd around them cautiously moved away as he began to slap himself in the face.

Paxton grabbed his brother's hands and Max immediately squatted down and grabbed his knees. "Calm down Max," he said in a firmer voice. A path had opened and the professor was walking swiftly toward them.

"What's the matter?" he whispered.

"Max figured out how it worked and that kid was standing right beside him," Paxton explained as he wrapped his arms around his brother.

"Oh, that's too bad," the professor sympathized. "But unfortunately, we've awarded the prize already."

"Max won the scholarship," he whimpered one last time.

"What can I do?"

"I just need to get him out of here," Paxton said as he looked around at everyone now gawking at them. He lifted his brother beneath his arms then he pushed him toward the exit. Near the back of the room, he saw three cameramen with their cameras pointed right at Max. The one closest to them lowered as a pale hand rested atop a massive tattooed arm and coerced it down.

"Stay on them," he heard the slick-haired reporter direct his cameraman. "Who knew science could be this exciting," he laughed.

As they hurried to the elevator, neither noticed the wide Samoan move into the opening behind them, flare out his elbows, and block anyone else from following behind them.



