

*Kara Culhane*

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## Portrait of a Steam Engine

*If the steam inlet is too close to my neck, I will surely be burned.*

Tammy sat on the edge of her bed with her hands folded in her lap. She sat peacefully contemplating the problem with her steam inlet. She always sat peacefully when she contemplated anything having to do with her engine.

*If the steam inlet is moved, however, it would quite possibly prove itself counterproductive.*

Her room was full of bright light. Tammy felt most productive in bright light. It served as a spotlight for her and signaled her to perform. It was for that reason that she decorated her room all in yellow, except for her dust ruffle and pillow shams which were white. She awoke each morning with a reminder to perform. Her performances varied with each phase of her life but she never missed a beat.

Tammy liked to feel space. The space made her feel alive and ready. She could accomplish anything in a room with a lot of space. She had only her yellow bed, her yellow desk and her yellow chair. On the floor in front of her bed was her steam engine. Tammy did not mind that the engine took up so much of the floor space in her room.

*I think I will leave the steam inlet where it is and risk third degree burns on my neck.*

“Honey?” Tammy’s mother peeked her head into Tammy’s room. “Dave’s here to see you.”

Dave pushed open Tammy’s door and brushed past her mother. She wiped her hands on her apron and shot Tammy a look that said, “Smile, sit up straight and be charming.” Her eyes then fell on Tammy’s steam engine. “Nice girls don’t play with steam engines,” her eyes said to Tammy.

“What’s up Tammy?” Dave tossed his backpack on the floor, hopped over the flywheel, and sprawled himself across the foot of Tammy’s bed.

*I don’t think the slide valve properly seals up the exhaust port.*

Tammy used to love Dave so much. She loved to live only to see his face, to hear his voice and to touch his giant biceps.

“Roger’s little sister said you missed cheerleader practice again today. She said you’re gonna get kicked off the squad if you miss one more.” Dave caught his reflection in the mirror on the back of the door.

*I wonder if the size of the steam chest has anything to do with the slide valve not sealing up the exhaust port.*

Tammy loved her steam engine. Every spare moment she had went into building her engine. She didn’t have time for cheerleading practice anymore. She didn’t have time for Dave anymore.

“Peter’s parents are going out of town this weekend. He’s gonna have a kickin’ party. Probably get a keg or something.”

Dave flexed his right arm and admired it in the mirror.

*I will definitely have to check the slide valve, the exhaust port and the steam chest.*

Tammy loved checking the parts on her engine. She felt that each check was one step closer to perfection. Tammy savored the work toward perfection. This perfect engine would be *it* for her.

“Peter’s such a dick but he throws such killer parties.” Dave flexed his left arm and admired it in the mirror. “Oh, I gotta tell ya what happened at football practice today.” Dave flexed both arms and admired them in the mirror. “Coach caught Gibson with a pack of smokes in his locker. He’s totally busted.”

*Dave is so dumb.*

Tammy leaned forward to get a closer look at the driving rod.

*The driving rod looks good.*

Tammy’s engine had been completely assembled for three days. Her work had come to an end. She wanted to work on her steam engine forever. Tammy had not tried her engine on yet. It would signify the end, once she strapped her engine on her back. Tammy didn’t want it to end yet.

“My old man says I gotta work for him this summer. He pays me pretty good, so it won’t be that bad. Long as it doesn’t cut into football camp.” Dave checked his hair in the mirror.

*I don’t think the cross head is properly attached to the driving rod.*

“Tony heard you guys get to ride on the bus with us to the Jefferson game. He’s gonna sneak some stuff on the bus so we’ll get totally wasted. It’s gonna be so cool.” Dave checked his hair in the mirror again. “So don’t get kicked off the squad.”

*I’ve got to check the quantity and pressure of the steam entering the cylinder from the steam boiler.*

Tammy loved her steam engine so much that she wished she could always be near it. Even though she wasn’t ready to wear it, she was looking forward to being able to put it on her back and to feel it stir violently against her skin. Those thoughts gave her goose bumps.

“Andrea’s pissed at you. She says you’re trying to act all cool or something — you don’t hang out anymore.”

*How fast the flywheel turns and how much work it can do depends on the quantity and pressure of the steam. Yes, I will have to check it.*

Tammy knew that her engine was going to change her life. Having the engine fastened to her back would validate her — it would validate her whole being, her whole existence. It would stand for her and she would stand for it.

*Dave is very dumb*

Dave looked at Tammy for the first time since his arrival.

“Andrea’s right. You don’t act the same anymore. You don’t go to cheerleader practice anymore. You don’t go to parties anymore. You do skip classes but it isn’t for the right reasons anymore. And you don’t hang all over me anymore.” He looked at her engine. “Ever since you started putting that thing together. It’s so dumb. It’s like that thing made you forget what’s important. Why do you always have to do stuff with that thing? I know what’s gonna happen. That thing’s not gonna work and then you’ll look around and you won’t have nothing. All the important things in

your life are gonna be gone — no cheerleading and no me.”

*I can't believe how dumb Dave is.*

Tammy stood up. “That thing, as you so ignorantly call it, is a steam engine,” she took a step toward her engine, “a machine that produces work by the pressure of expanding steam against a movable piston in a cylinder.” She knelt down in front of her engine.

*Yes*

“Like the automobile engine, the steam engine is a reciprocating engine.” She put a hand on the flywheel. “The piston travels back and forth in a straight line.” Tammy quickly and sharply turned her head to look at Dave in the face. She gave him a hard look and then slowly turned back to look at her engine. “This to-and-fro action usually has to be changed into a rotational movement, since most steam engines are used to turn wheels or other revolving devices such as drive shafts.” Tammy stood up again.

*This means something.*

“The piston is therefore connected by a straight shaft, or ‘piston rod,’ to a crosshead outside the cylinder, that slides back and forth between supporting guides.” She moved to the back of her engine.

*I feel it.*

“A connecting rod joins the crosshead to an off-center pivot point on a large, heavy flywheel.” Tammy slapped her flywheel. Dave jerked from the suddenness of her action.

*I am moved.*

“As the piston in the cylinder moves from one end to the other, the flywheel completes one-half of a revolution.”

*I am changed. Truly changed.*

“As the piston returns, the revolution is completed.”

*This is it. It is time. It is now.*

Tammy bent down and turned around. She straightened out the shoulder straps and slipped her arms through them. Dave leaned forward. Tammy closed her eyes and took three short, deep breaths.

*The steam inlet's connected to the steam chest, the steam chest's connected to the slide valve, the slide valve's connected to the exhaust port, the exhaust port's connected to the cylinder, the cylinder's connected to the piston, the piston's connected to the*

*piston rod, the piston rod's connected to the driving rod, the driving rod's connected to the crosshead, the crosshead's connected to the flywheel...*

Tammy looked up and saw her yellow desk. It was the spotlight and it was time to perform. Her life up to that moment had all been a preparation. She was prepared for this. She had rehearsed it over in her mind countless times. Thoughts of that moment had been what put her to sleep at night and what had awakened her in the morning. She was ready to stand with her engine and speak to the world.

*I can.*

Tammy adjusted the straps so that the cushions rested on her shoulders. She started up the steam boiler and her engine chugged intensely. Steam began to rise and fill her room.

*I am feeling it stir violently.*

She leaned forward to find her center of gravity. Her engine was big so she needed to balance it perfectly on her back. She slowly began to rise. It wobbled and she began to sweat. Her engine was heavy. As she rose, she continued to lean forward so as to keep her engine under control and on her back.

*This is a heavy engine.*

She lifted her engine one inch from the ground. Her sweat dripped down her forehead and into her eyes.

*I should have taken off my sweatshirt.*

Tammy blinked her eyes several times and took breaths like a weight-lifter does before lifting his weights. With every atom of strength, determination and inspiration she possessed, Tammy forced her body upward. With her, her engine rose.

*It's working.*

Tammy stood up with her body bent forward at a 90 degree angle and her engine riding high on her back. She held that stance for a fraction of a second. Her engine was too heavy.

*Uh oh.*

The engine itself worked perfectly; she couldn't have built a better one. It was just too heavy. Tammy started to stagger. Dave jumped up from the bed but it was too late for him to do anything to help her.

In one giant motion, Tammy's engine pulled her forward, flipped her over and wedged her, upside down, between her yellow bed and yellow desk.

"Jesus fucking Christ!" Dave charged toward Tammy. Tammy's mother burst into the room.

"What in the world is going on? Tammy, I knew that thing was trouble from the first moment I laid my eyes on that wheel!" Tammy's mother and Dave grabbed Tammy's legs and started to pull. Her engine let out an ear-piercing shriek and so did Tammy.

"Leave me alone! Get the hell out of here. I mean it." Tammy reached behind her back and shut off the steam boiler. "Go away." Tammy's mother and Dave looked at each other, shrugged and quietly left the room. Tammy closed her eyes. She cried. Her engine was too heavy. She reached back and touched her neck.

*Definitely third degree burns.*