

# **ELECTRIFYING WOMEN**

**From fact to fantasy**



**Edited by Hannah Stone**

**In collaboration with The University of Leeds project:  
'Electrifying Women: Understanding the  
Long History of Women in Engineering'**



## *The Lasting Tooth*

### **Résumé**

*The Lasting Tooth* (working title) is a play about the perks and costs of living one's life outside tracks and boxes. It tells the story of Amelia Rose Miller, a woman of science and determination who took part in the greatest engineering adventures of her time. As a Tooth Fairy Engineer, Amelia Rose revolutionized the industry: she developed new protocols to harvest children's milk teeth and extract material such as emotional intelligence or resilience to redistribute to the needy.

Having recently become a pensioner, Amelia Rose is gloomy: the 'senior' role is as ill-adjusted to her personality as the 'housewife' role had been. She is not ready to be retired, and already an idea is taking shape. Thanks to her engineering experience and flair, she thinks she can transform into something precious a neglected commodity: the fallen teeth of elderly people. The play will show not only how the challenge is a scientific and engineering one, but how it is also a social one: once again, Amelia Rose must deal with the reaction of her family, entourage and of society at large. Allies and foes come in all sizes and shapes, and from ever surprising stocks.

### **Cast (provisional)**

Amelia Rose	Tilda Swinton
Jacob, husband	Steve Buscemi
Sophie, daughter #1	Amy Adams
Maid, Teresa	Maggie Gyllenhaal
Melanie, best friend	Frances McDormand
Ex-colleagues	Gary Busey, Willem Dafoe
Butler, James	Liam Neeson
Aunt Livia	Honor Blackman

...and Thomas William Hiddleston as the Voice over

#### **SCENE ONE**

*Where a decision is taken*

**INT. HOUSE – MULLION COVE**

*A Victorian house overlooking an angry ocean and a low brooding sky. A woman in her early seventies, thin and with a stiff upper lip, is sitting in one of the large red armchairs of the reading room. She is surrounded by books and 2D and 3D models of submarines, engines, brains and teeth. On the*



*mantelpiece lie framed photographs showing her in her overalls with various people and teams, smiling, shaking hands or focused on a blueprint. The woman doesn't pay attention to her surroundings but gazes at the horizon. Her right index finger mindlessly follows the curve of her teacup. Next to her, Thomas William Hiddleston, the Voice over, declaims while pacing up and down. At first, his agitation contrasts with her calm. Gradually though, she too becomes agitated.*

*Thomas W. Hiddleston:*

*Amelia Rose is grumpy. She peeks at a book lying on the adjacent console and then back at the ocean, making a face. Teresa, the maid, keeps leaving here and there books about knitting, cooking and gardening. Teresa had always disapproved of Amelia Rose's professional choices. At least, she did it openly, whereas other members of the staff and of her family communicated their views through sighs and looks. Her daughter Sophie – an ill-suited name after all – had become the queen of looks. Amelia Rose doesn't care. She never had. Admittedly, she couldn't cook, knit or keep a plant alive. She could, though, draw the blueprint of any sort of machine, engine or robot, she could run a factory – and she had – or repair a submarine. She hits the armrest with her fist, startling the Voice over. The view is breath-taking. Jacob – her husband, God bless his support – would want to go for a walk. She had always preferred the smell of chemicals, the greasy atmosphere of shop floors and neon lights to a 'walk.' She stands up, touches her cheek, and begins to walk back and forth. One of her teeth is loose, had been for quite some time now. She can feel it move when she pushes it with the tip of her tongue. How ironic. Her mood darkens. Amelia Rose had worked with splendid minds such as those of Amy Johnson, Hilda Lyon or Annie Wilson.*

*Amelia Rose Miller:*

*I have flown alongside Amelia Earhart.*

*Thomas W. Hiddleston, still addressing the audience:*

*She had had a splendid career and, as a Tooth Fairy Engineer, had a leading role in the teeth industry.*

*Amelia Rose Miller:*

*I have designed the machines to harvest children's teeth from under their pillows. I have written formulas to transform them into emotional energy and into resilience. I've built the factories to do it. I've done it at a time when*



women were allowed around machines only to sweep the floor or to bring a cup of tea.

*Thomas W. Hiddleston:*

Amelia Rose has first devised the means to redistribute the precious result of the process to the needy. She has done it all right under the nose of the patronizing lords, sirs and gentlemen, and while raising five children and attending to a household.

*Amelia Rose Miller:*

Jacob was supportive, but there were limits.

*Thomas W. Hiddleston:*

Amelia Rose has been a great and happy engineer.

*Amelia Rose Miller:*

I was a great and happy engineer.

*Thomas W. Hiddleston, finally turning to Amelia Rose:*

And you don't want it to be over. Hence the grumpiness.

*Amelia Rose Miller:*

I retired two weeks ago ...

*Thomas W. Hiddleston:*

... the toasts and speeches of your retirement party are still echoing ...

*Amelia Rose Miller:*

... and I despise it.

*Thomas W. Hiddleston, raising a finger:*

But you have beaten the gender gap. You can beat the laws of old age.

*Amelia Rose Miller, brandishing a book about the fundamentals of thermodynamics:*

I took up the gauntlet then, and I will take it again now.

*Thomas W. Hiddleston:*

You will give Sophie, and the others, a good reason to sigh for another decade or two.



*Amelia Rose Miller, forcefully putting down the book:*  
Yes I will. Oh, and I have an idea alright.

*Thomas W. Hiddleston, overboard:*  
Old teeth!

*Amelia Rose Miller, evidently surprised:*  
Yes. Old teeth. As Tooth Fairy Engineer, I have done miracles with milk teeth.

*Thomas W. Hiddleston:*  
On the other side of life though, teeth are disregarded. As are old people. As you, as a woman, have been. But you know better.

*Amelia Rose Miller:*  
I know better and I am sure there is much to be gained from this raw material.

*They have been pacing around each other, pointing and brandishing. At this point they stop and face each other. They have a silent dialogue, smiling with a knowing look. They say in unison, low and slow:*

*Amelia Rose Miller/ Thomas W. Hiddleston:*  
The barn.

*Thomas W. Hiddleston:*  
The barn would make a very nice workshop.

*Amelia Rose Miller:*  
A very nice workshop indeed.

*Thomas W. Hiddleston:*  
It hasn't been used in years.

*Amelia Rose Miller:*  
The perfect place. I could call Melanie, she would help me get rid of all the junk.

*Thomas W. Hiddleston:*  
And clean it and rearrange it.



*Amelia Rose Miller:*

I need a sizeable desk, file cabinets and shelving units. Tables and tools, and machines.

*Thomas W. Hiddleston:*

And a lab bench. You could probably find some at the Teeth Company. They have a stock of castoff furniture. James would help you bring it back. But what will Jacob say?

*Amelia Rose Miller:*

As long as the house stands and he gets his three meals and brandy, he'll support me.

*Thomas W. Hiddleston:*

Will the house stand?

*Amelia Rose Miller:*

Well, Teresa has been its pillar for all those years more than I have. She has relentlessly complained, but she made it work. The household, and hence my career.

*Thomas W. Hiddleston:*

But what will the neighbours, your ex-colleagues, the women of the parish's club think? And your daughters, your sons-in-law, your grandchildren, the family?

*Amelia Rose Miller:*

My God, so many people to please, so many requirements to meet. I think I will do as I always have: not care on the one side, and give love and an example on the other. Some of them might even be proud. What do you think?

*Thomas W. Hiddleston:*

I think they should. I am.

*Emotional Silence*

*Thomas W. Hiddleston:*

But I wonder.



*Amelia Rose Miller:*  
What about?

*Thomas W. Hiddleston:*  
The teeth: how will you find them? You'll need teeth to begin your research.  
Old teeth.

*Amelia Rose Miller:*  
I might pay a visit to my old aunt Livia.

*Thomas W. Hiddleston:*  
You haven't seen her in years.

*Amelia Rose Miller:*  
All the more reason to visit. She lives in a care home, a posh kind of place, mind you. I could bring along Sophie, she is good at grabbing – and keeping – attention. While she does her little number, I could snoop and sneak to learn a bit more about the teeth habits of the residents.

*Thomas W. Hiddleston:*  
I didn't know being an engineer entailed such a wide scope of activities.

*Amelia Rose Miller:*  
Being a woman entails being resourceful. You can't live the dream. You must invent it, weave it and fight for it.

*Thomas W. Hiddleston:*  
So, you are sure? No knitting, no naps, no resting on your laurels.

*Amelia Rose Miller, sits:*  
So sure. Two weeks since I retired and I crave the smell of grease, the creaks and squeaks of the machines, the excitement of facing problems and finding solutions. I suspect that there is wisdom and nuggets to be extracted from old teeth. You know, it could help people. I have an idea for a machine. I need only to make some changes to the original MTE, the Milk Teeth Extractor. If I modify the throttle shaft and...

*Thomas W. Hiddleston:*  
Don't get all technical on me. Here – *he hands her a notepad and a pencil* – I guess you've missed the sweet smell of blueprints as well?



*She takes them, pulls the console towards her and clears it up, passing the books about knitting and being someone she's not to the Voice over. He grabs them and drops them behind her chair. She doesn't notice, fully engrossed in her diagram. He sits, evidently content. Borrowing her cup, he pours himself some tea. Outside, the sky is high and amok.*

## SCENE TWO

*Where Sophie visits the barn (to be continued)*

*Barbara Muller*



## *Foreword*

History distinctly lacks the female touch, both in terms of the people recorded and the authors who document it. The men are there in droves, with their innovation and invention, their politics and policies. The women whose stories have passed through the annals of time to us are usually those of a higher 'station' or who broke the mould such as Boudicca, the six wives of Henry VIII, Elizabeth I, and Florence Nightingale. Their stories could not be stifled or silenced and live with us largely through oral history or fiction. Yet, still now only a minute percentage of the women's lives that have been lived have ended up among the "chosen few" to be highlighted on the National Curriculum throughout schools in England.

The Women's Engineering Society (WES) celebrated its 100 year anniversary in 2019. Yes, one hundred years! Women have been involved in engineering for at least that long and have made some remarkable contributions. But very few of those women have made it into the history books or have an online presence. Today, only 12% of the British engineering workforce is female, despite women having played, and continuing to play, a significant role in the sector. WES believes this is largely to do with the inherent prejudice in British society that engineering isn't an appropriate career for girls. WES strives to overturn this belief and reveal the history of the women who have made a difference and provide role models to inspire future generations.

The Electrifying Women project has built on the research that has been carried out during the Society's Centenary year. I took part in one of the creative writing workshops, held at the inspiring Leeds industrial Museum. The workshop was thought-provoking and enlightening. Whilst facts may have been lost through time, using the resources and archives of the Women's Engineering Society and with the guidance of Hannah Stone, the writers in this anthology have brought to light some of the remarkable women engineers of the last century. These poems, stories, letters and plays, although fictitious, have explored what life might have been like for these women to follow their dreams and ambitions in a male world, and whose stories might otherwise not have been told.

Helen Close, Centenary Trail Project Officer, Women's Engineering Society