

# The Tale Of Two Henrys

*Abridged*

Michael A Daly  
Snr Director - Stuff

# Michael...



# Imperva

- CWaf / DDOS / Security tools
- 60+ PoPs globally
- >1000 Network Devices
- >4000 Servers
- Purchased by Thales in 2023

# Imperva - current issues

- We have many systems that make changes - They don't talk to each other
- Old code - Java, PHP, Groovy
- No modern libraries
- Very little documentation
- Fire and Forget - We never know if changes were successful

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# Imperva -

- We have more changes -
- They don't
- Old code -
- No modern changes -
- Very little
- Fire and F
- were success

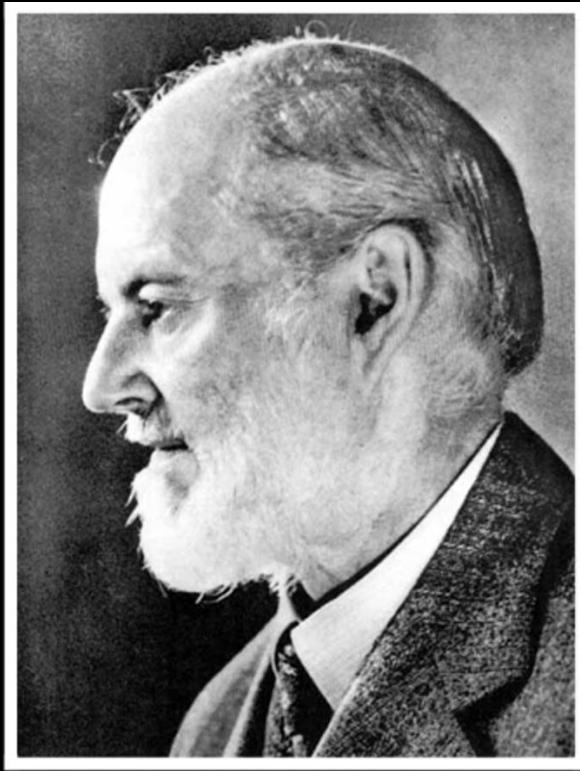
changes -

w if changes



A black and white photograph of a large audience seated in tiered seating, facing a stage. The seating is arranged in multiple levels, creating a amphitheater-like structure. The audience members are visible as small figures against the dark background of the auditorium.

1863 was a great year for cars



Henry Royce

# **ROYCE LIMITED**

TRAFFORD PARK, **MANCHESTER.**



Foto N° 42  
Foto Stock 3 Nos  
Cameo Sport 73.5  
Carlo & Co.  
Cameracolor

**ELECTRICAL CRANE MAKERS.**

Cranes

A wide-angle, black-and-white photograph of a large audience seated in rows of theater-style chairs, facing towards the left. The seating is arranged in multiple levels, creating a tiered effect. The people in the audience are mostly seen from the side or back, appearing as dark silhouettes against the bright stage area. The overall atmosphere is that of a formal event or conference.

# Let's Talk About Precision

A black and white photograph of a large audience seated in rows of theater-style chairs, facing towards the left side of the frame. The seating is arranged in a slight curve, with more rows visible in the background.

Let's Talk About ~~Precision~~ Accuracy









# A History of Precision

Brief  
A ^ History of Precision

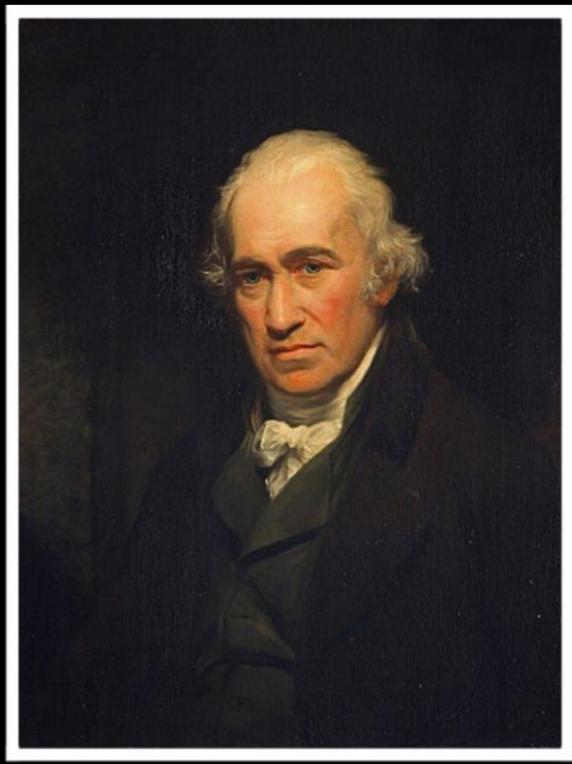


John Wilkinson

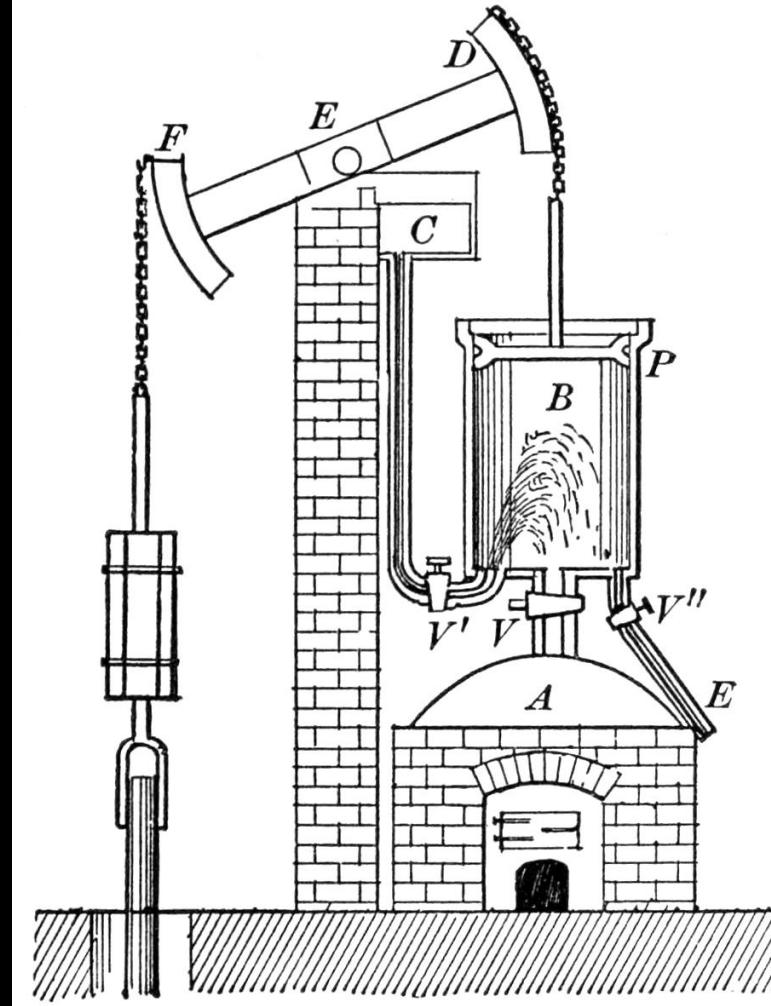
"A new method of  
casting and boring  
iron guns or cannon"

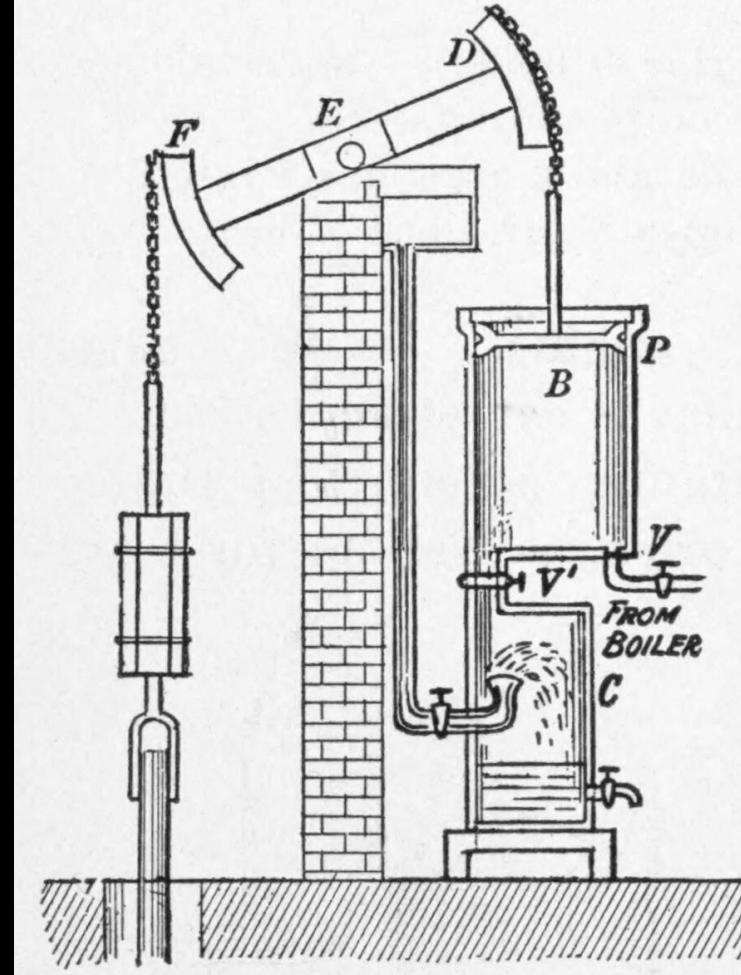
1774





James Watt





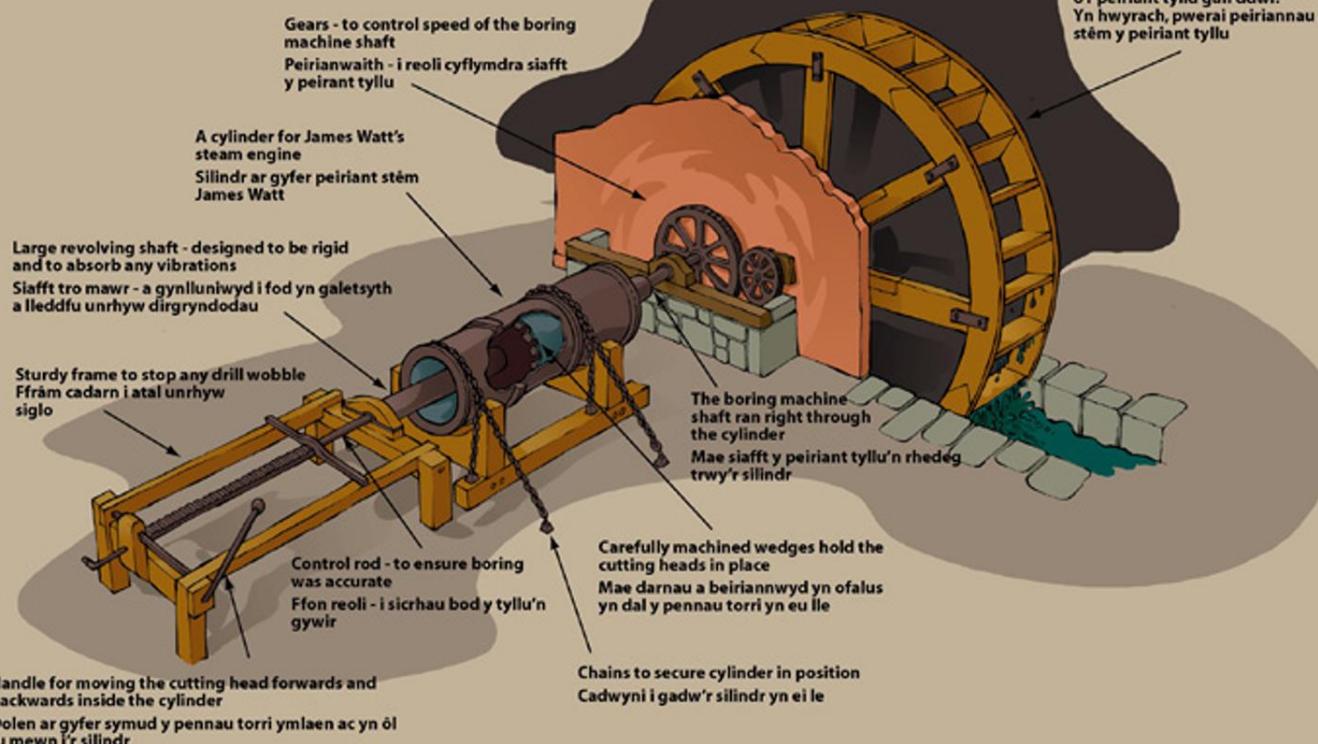


John Wilkinson

## John Wilkinson's Cylinder Boring Machine, 1775 (simplified drawing)

### Peiriant Tyllu Silindrau John Wilkinson, 1775 (darlun syml)

Early versions of the boring machine were water powered. Later, steam engines powered the machines

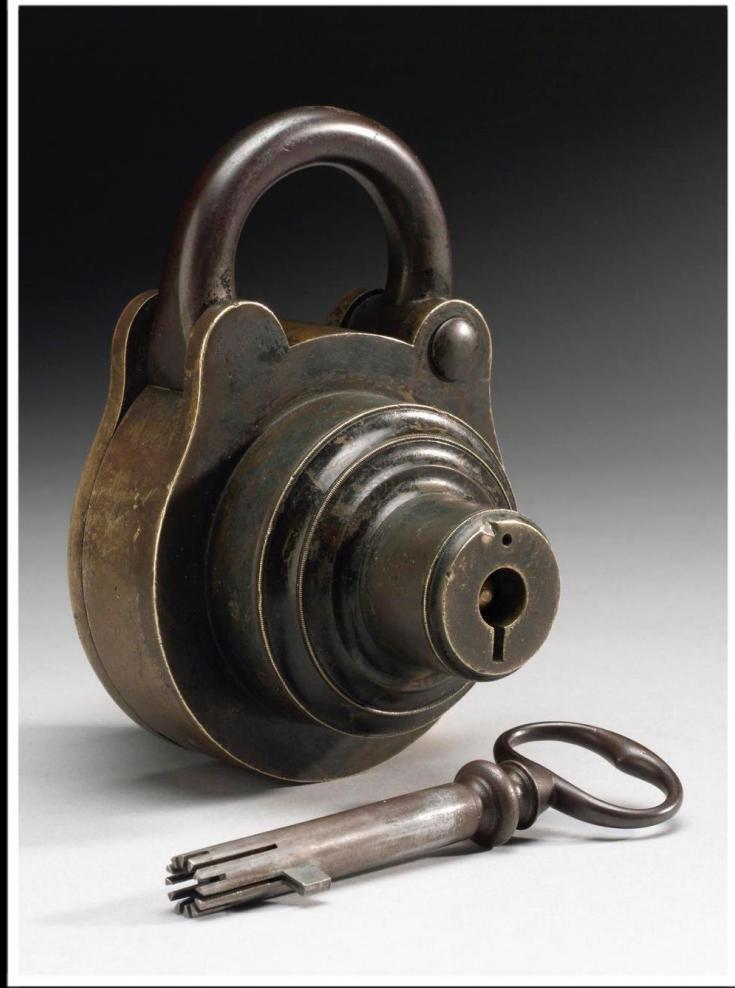


A black and white photograph of a large audience seated in rows of theater-style seating, facing a stage area. The seating is arranged in a semi-circular pattern, with more people visible in the background balconies. The foreground is dominated by the dark silhouettes of the audience members.

Let's talk about locks

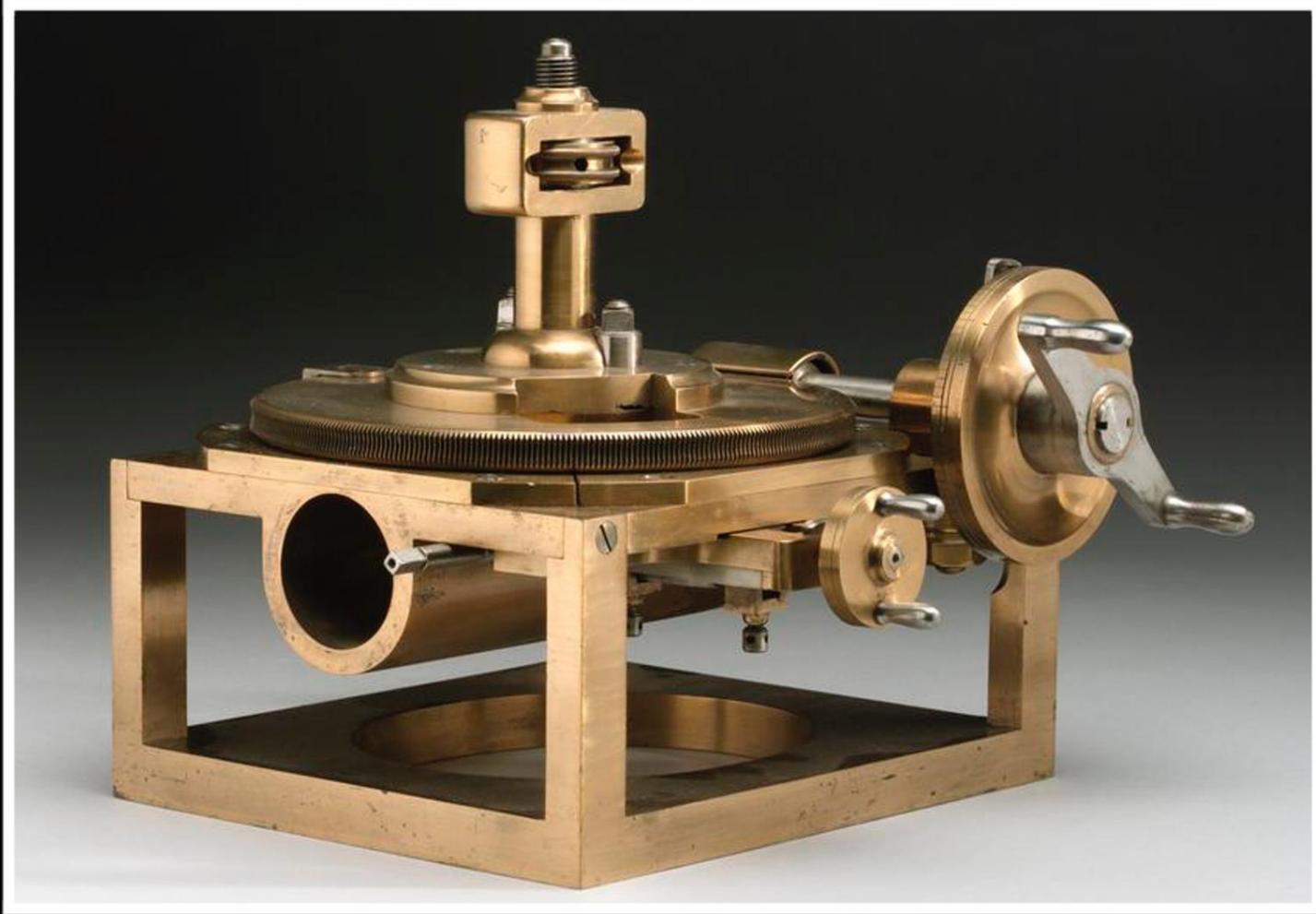


Joseph Bramah

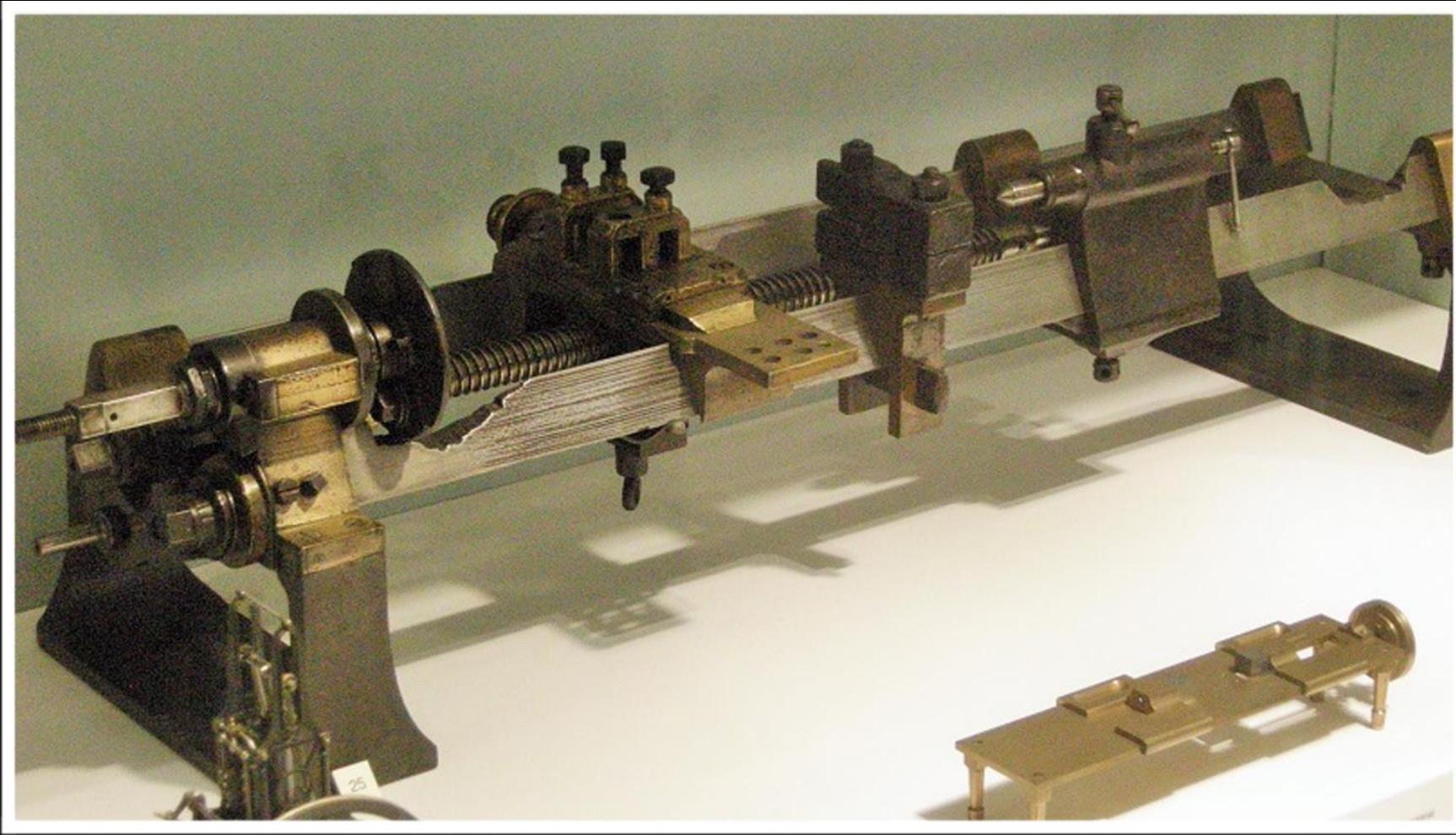




# Henry Maudslay





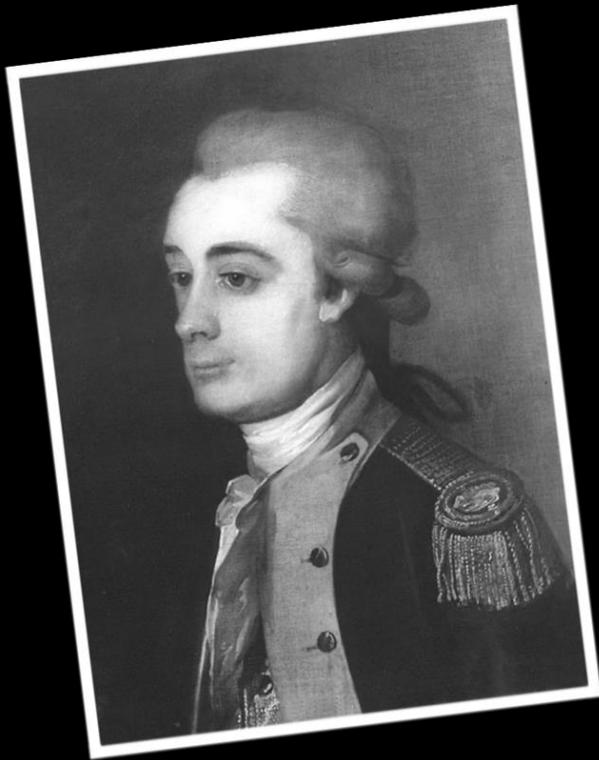




# Let's talk about Automation



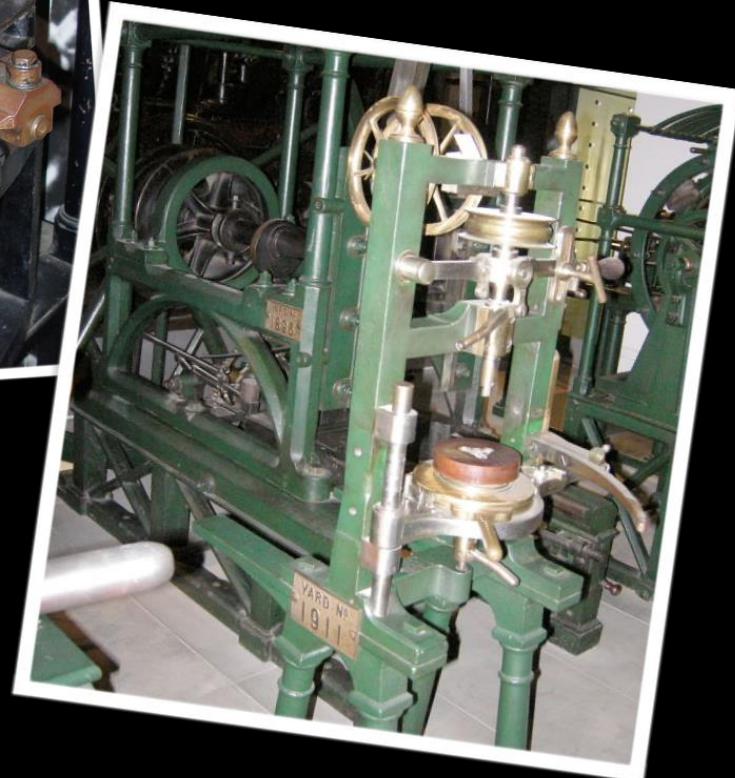
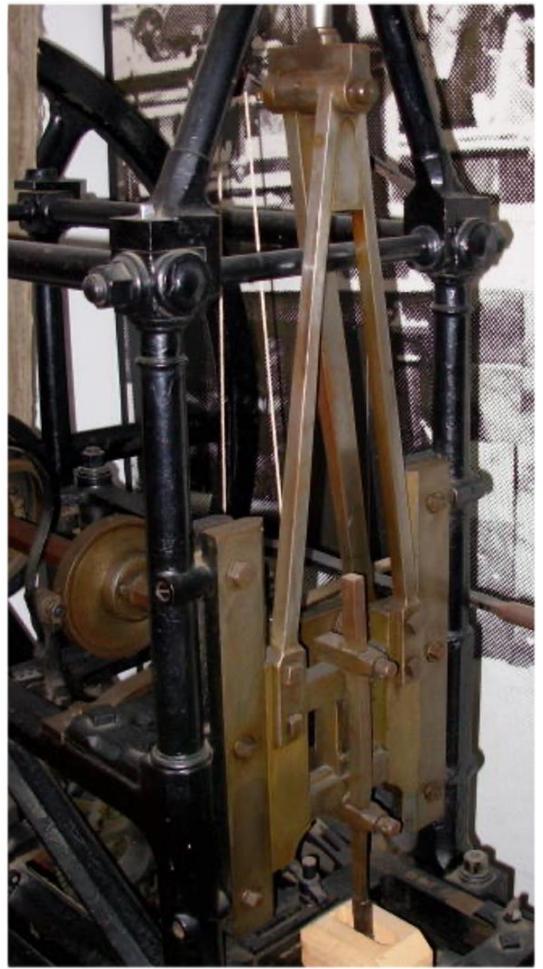




Sir Samuel  
Bentham



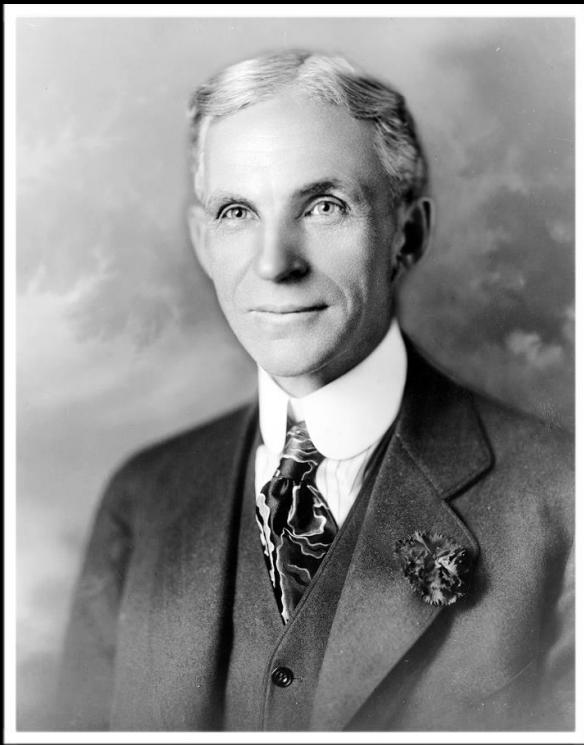
Marc Brunel



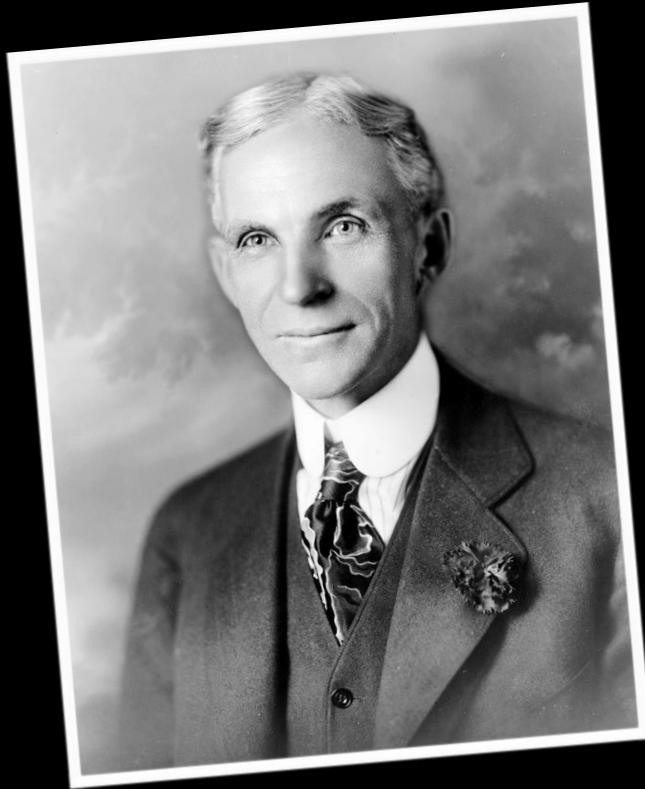


A black and white photograph of a large audience seated in tiered seating, facing a stage. The seating is arranged in multiple levels, creating a amphitheater-like structure. The audience members are visible as small figures against the dark background of the auditorium.

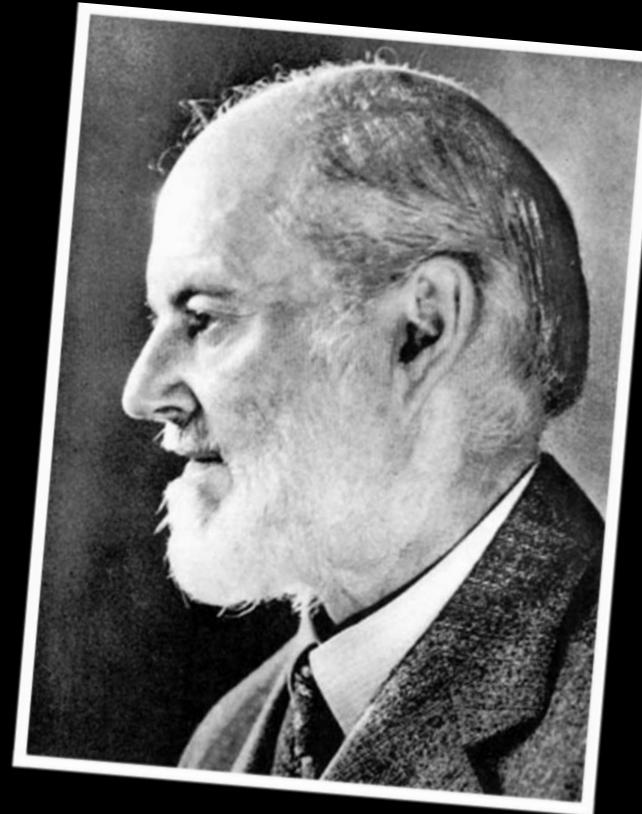
1863 was a great year for cars



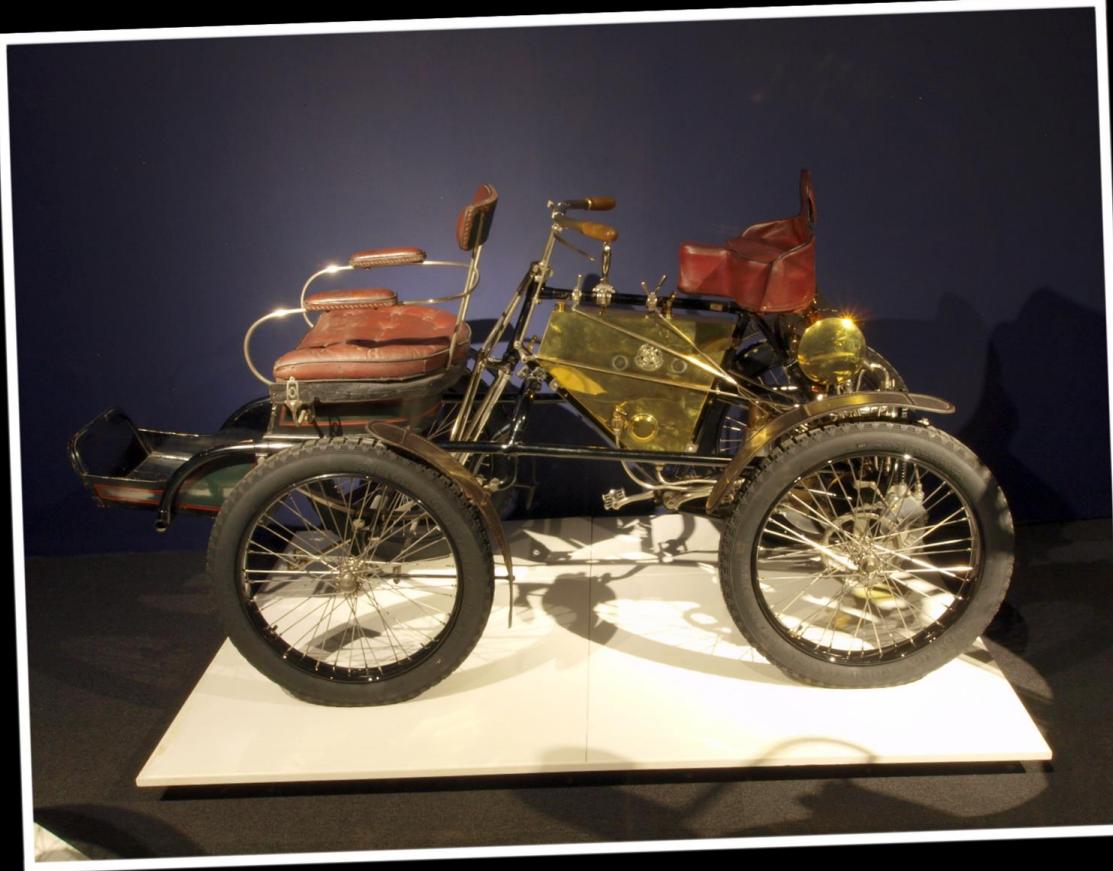
Henry Ford



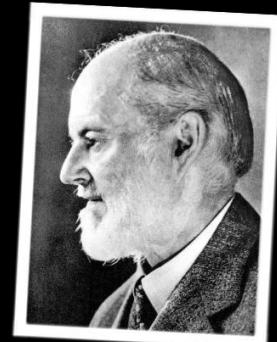
Henry Ford



Henry Royce

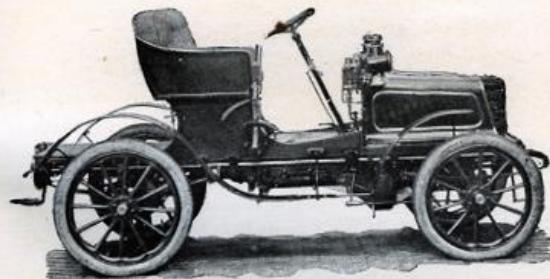


De Dion-Boulton quadricycle



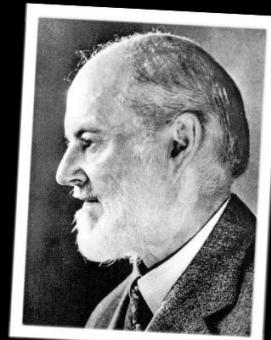


THE 10-H.P. STANDARD DECAUVILLE CAR, WITH TONNEAU BAIGNOIRE



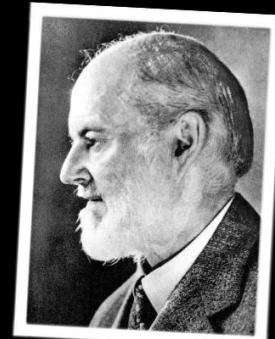
THE 10-H.P. STANDARD DECAUVILLE CAR, ORDINARY PLATFORM PATTERN

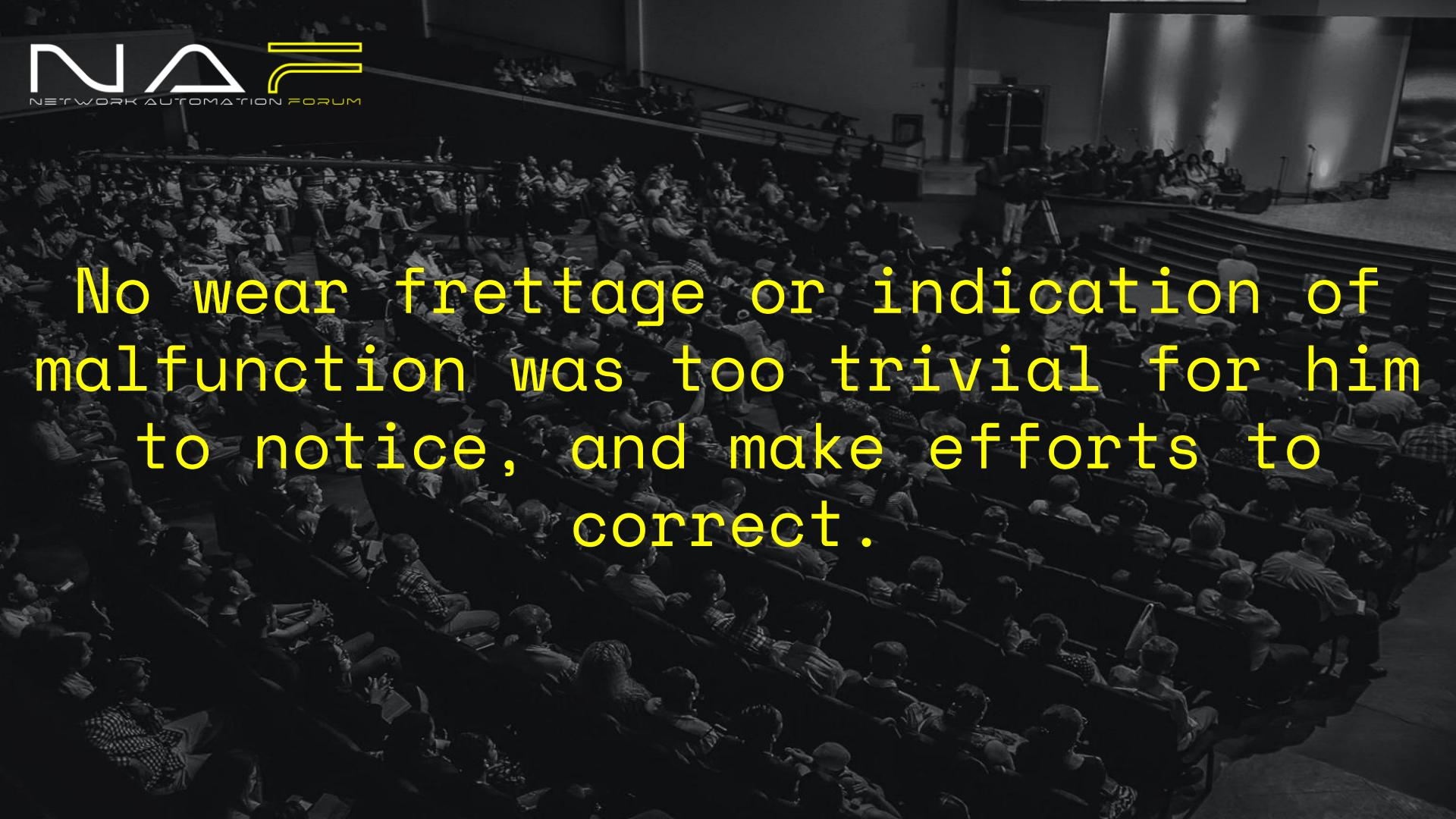
Decauville 10hp Standard





Royce 10





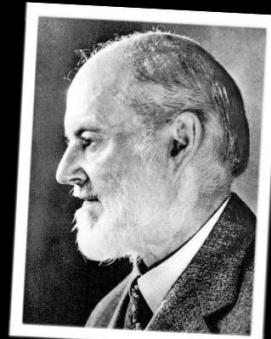
No wear frettage or indication of malfunction was too trivial for him to notice, and make efforts to correct.



Charles Rolls

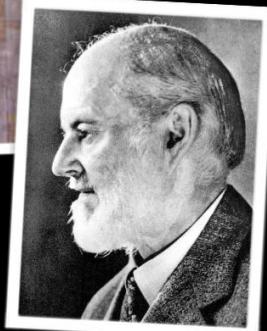


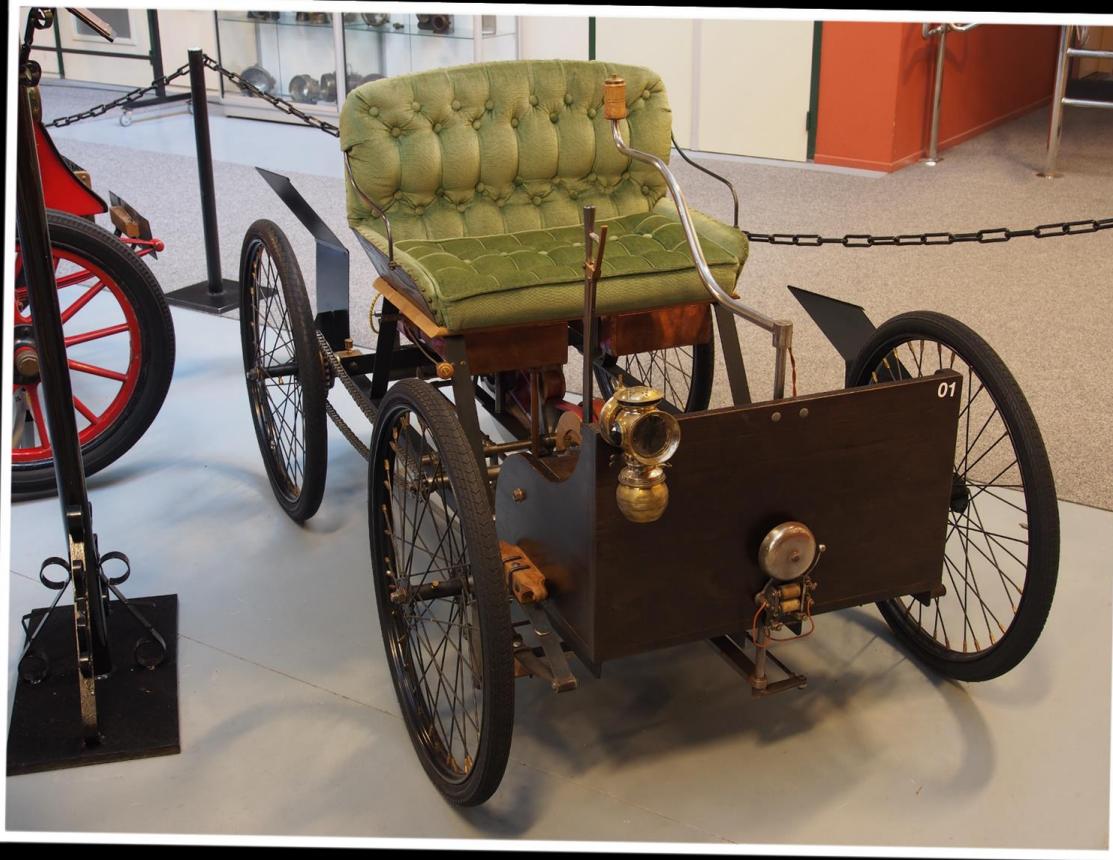
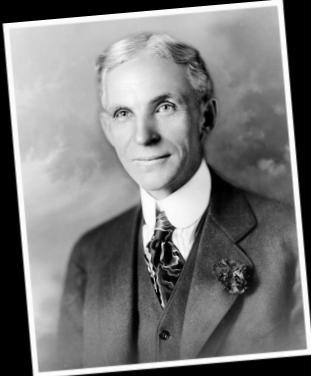
Rolls-Royce 40/50



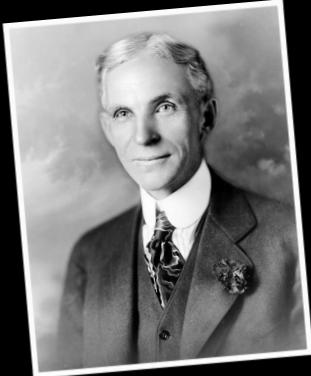


Rolls-Royce 40/50

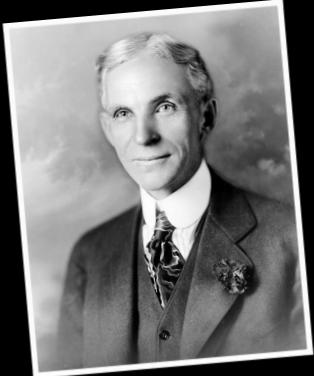




Ford Quadricycle



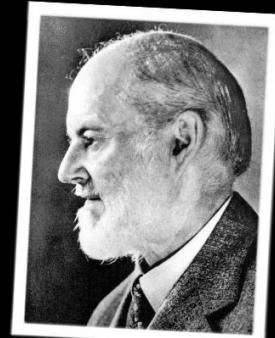
## Ford Model A

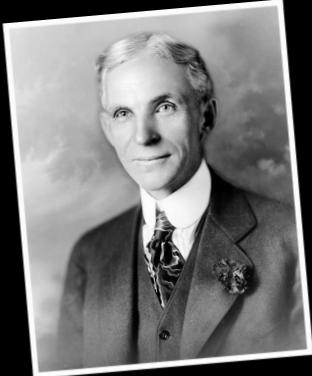


Ford Model T



Rolls-Royce Phantom





Ford Model T









# How are Imperva making this work?



# How are we doing this?

- Each tool uses standard connections
- Each component tool does one job
- Only one system makes changes at the edge
- Shared state - Easy to compare what is running with what should be running
- Services with single responsibilities - no more building things on top of things
- All new code with rigorously enforced standards



# Questions?