

From *Historic Tales of St. Louis*

By Mark Zeman



**German Spies,  
Germ Warfare, and  
Mules in WWI**



# The Need for Mules and Horses in WWI





# The Mule Was Essential

- Almost no use of cars / trucks
- A great deal of local transport of ammunition, weapons, food, medicine and other supplies was through beasts of burden
- By war's end, the British Army alone had 250,000 mules
- Mules were an essential war commodity:
  - They lived up to twice as long as horses
  - Had great endurance and recovery
  - Were surefooted
  - Ate forage instead of oats



Mules hauling wagons through muddy roads

# Endless Need for Animals

- In wartime, animals die from hazards such as wounds, starvation, sickness and injury
- In 1914, Germany had 4 million horses and mules
- England and France had 6 million
- America had 25 million



# The Supply

- Missouri was the largest exporter of mules
- Guyton and Harrington company was the largest
  - They had 6,000 acres of pasture with 18 buildings
  - The world's largest horse barns dubbed "mule palaces"
- Half the mules purchased by British Army (180,000) came from here

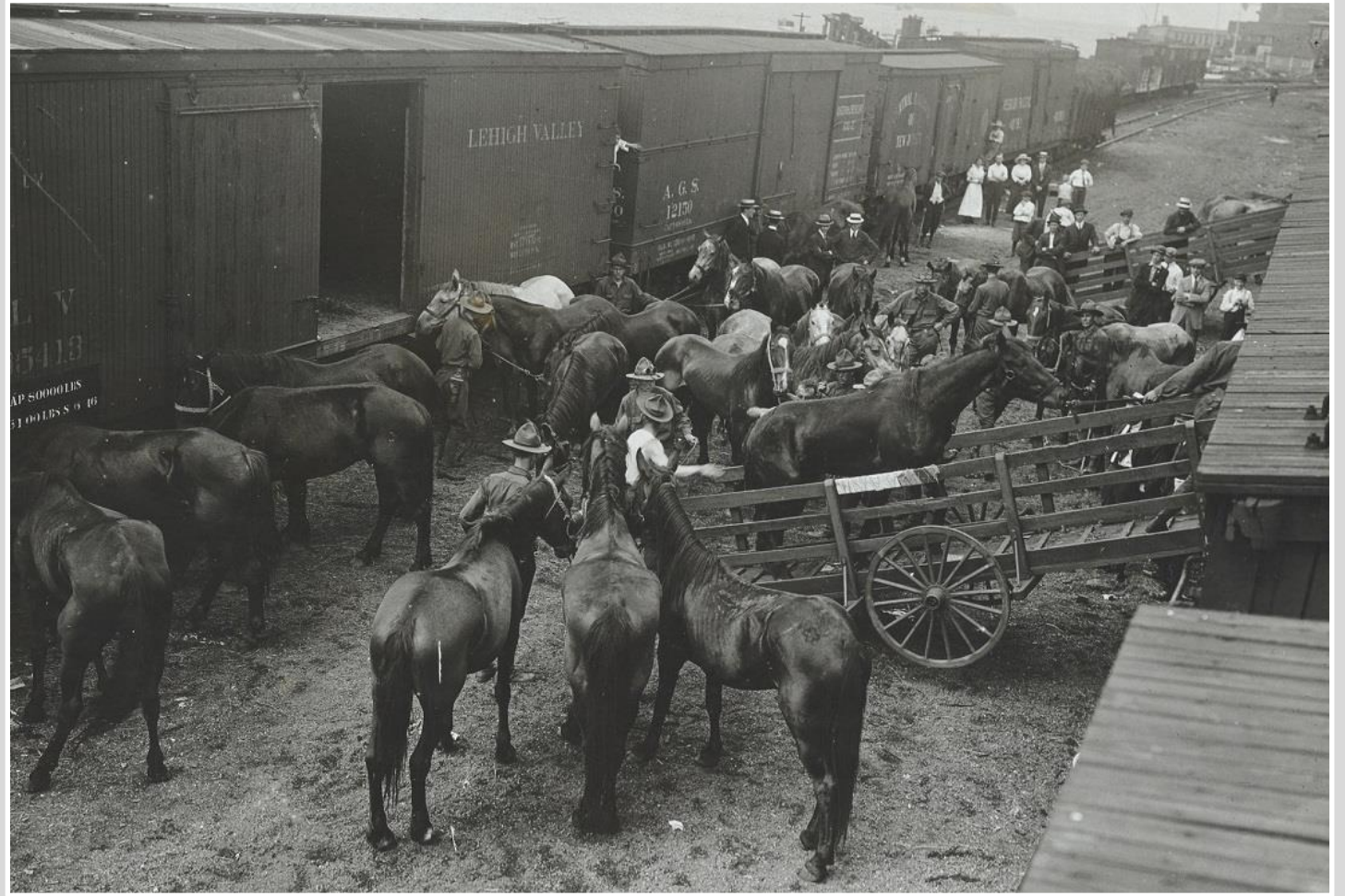


A "mule palace" at Guyton and Harrington company in Lathrop, Missouri



# The Transport

Suppliers from the West used three railroads – the Santa Fe, the Rock Island and the Burlington lines – to connecting lines from their rural facilities to St. Louis



A shipment of horses for cavalry at a New York City rail yard, 1918

# The Hub: Union Station

- Most lines ran through St. Louis
- Union Station was the largest rail station in the U.S. at 11 acres
- Crucial hub for transporting mules and horses





# The Destination

- Animals were then routed to Newport News, Virginia
- Animals stored in holding pens for shipment to Europe
- During the war, 457,000 horses and mules passed through Newport News alone

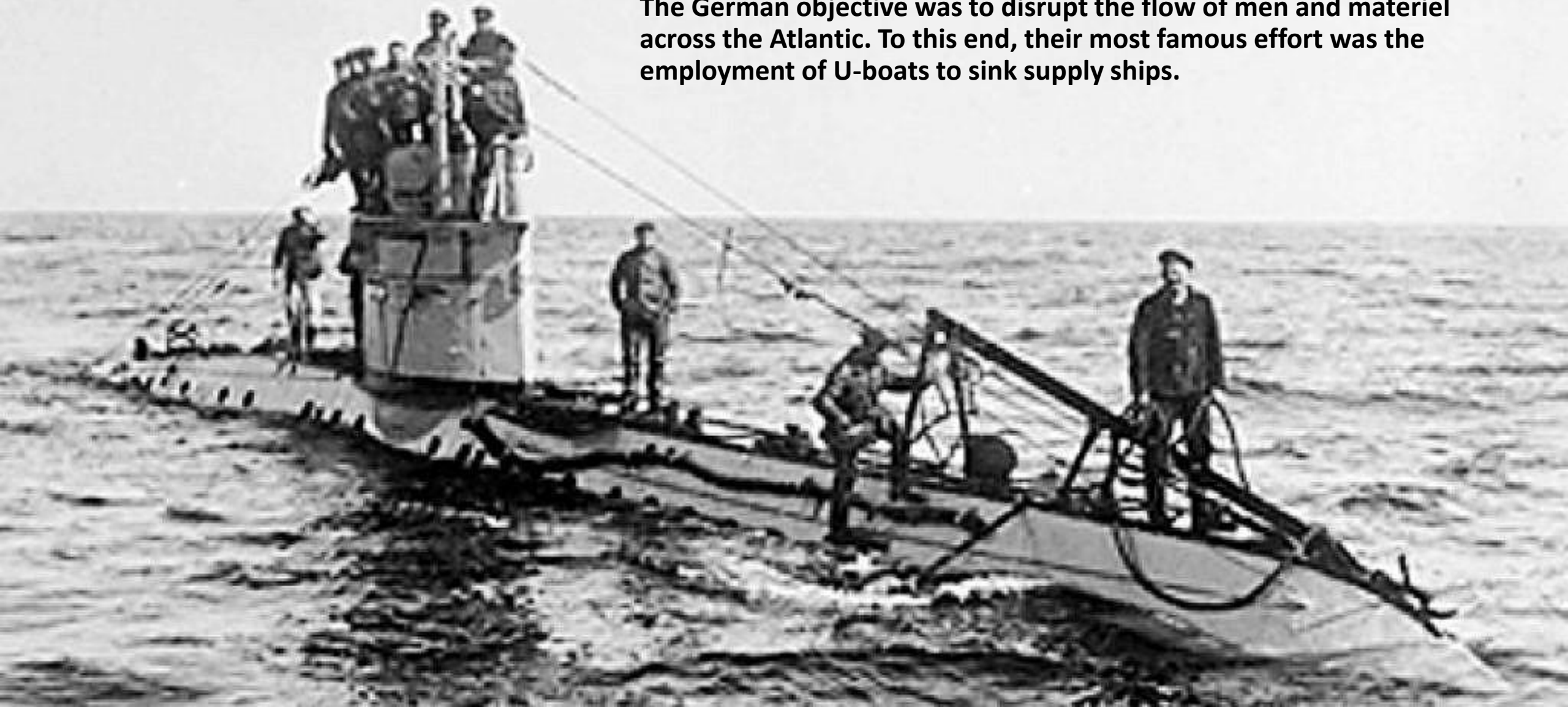


Horse pen in Newport News, Virginia



# Plan 1: U-boats

The German objective was to disrupt the flow of men and materiel across the Atlantic. To this end, their most famous effort was the employment of U-boats to sink supply ships.



# German Success

As Britain and France imported horses and mules from overseas, the German U-boats targeted transport ships carrying animals

Tens of thousands of mules and horses died at sea during the war



Unloading a mule in Alexandria, Egypt, in 1915



# Plan 2: Germ Warfare



**A horse in a Virginia holding pen, the victim of biological sabotage**

**700 horses awaiting deliver to the Army at Covington, Kentucky, were killed awaiting transport (1918)**

- **The second effort was to infect the animals while in the U.S.**
- **Infected herds would have to be pulled out of the pipeline**
- **Allies could not risk infected animals arriving in Europe**



# The Plot

- The Germans recruited Biochemist Dr. Anton Dilger and group of saboteurs
- Dilger set up fake doctor's office in Washington D.C. called "Tony's Lab"
- Develop strains of equine bacteria:
  - Anthrax
  - Glanders
- Have agents sneak into holding pens and inject animals and contaminate their food
- During 1915–1916, Dilger successfully killed thousands of horses and mules in pens

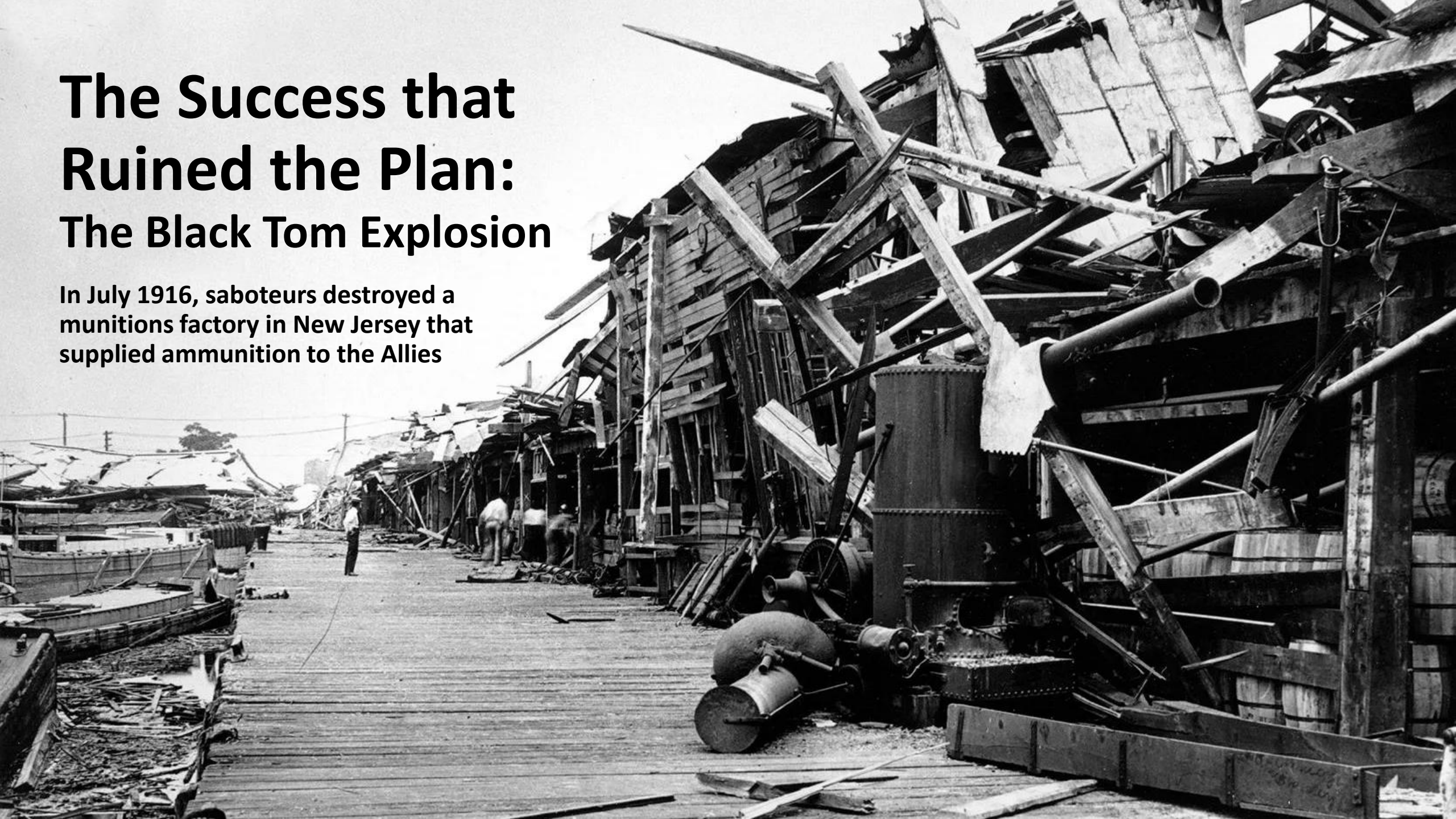


**Dr. Anton Dilger's passport photo, 1916**



# The Success that Ruined the Plan: The Black Tom Explosion

In July 1916, saboteurs destroyed a munitions factory in New Jersey that supplied ammunition to the Allies



# Liberty's Torch Damaged

- The Black Tom explosion was so powerful it damaged the torch of the State of Liberty in New York
- The torch used to have individual windows, and a giant light illuminated it from inside
- In 1985 the torch was replaced with a reflective gold surface illuminated by spotlights





# Lab Moved to St. Louis

- Federal investigators in New Jersey investigated suspects, and the heat was on
- Fred Herrmann moved the lab to St. Louis in September 1916
- He lacked Dilger's medical knowledge, so he was unable to grow the bacteria
- Federal investigators interviewed Dilger several times, but he was not arrested
- In 1916 applied for passport to return to Germany



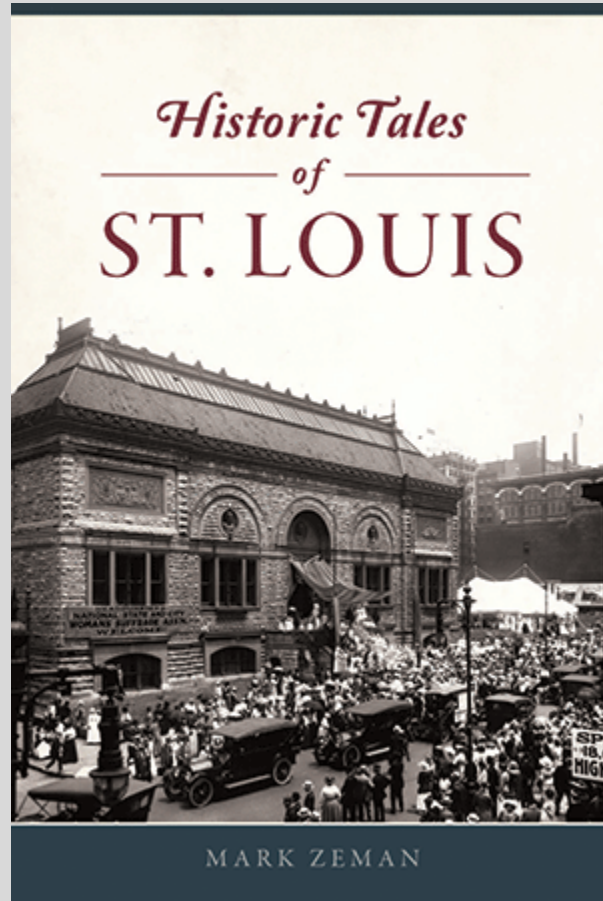
After the war, Dr. Anton Dilger received the German Iron Cross for his sabotage

# Special Thanks to

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A Chapter from  
*Historic Tales of St. Louis*

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Arcadia Publishing / The History Press