

# Steam Fire Engines in North Carolina

Presented by Mike Legeros  
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## Moving Water



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## Moving Water



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## History of Steamers

- 1829 – First steam fire engine, built in England.
- 1841 – First steam fire engine built in US.
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- 1853 – First steam fire placed in service in US, in Cincinnati.
- 1860 – Steamers now light-enough to hand-drawn (for a while).
- 1906 – Sizes are standardized across manufacturers.
- 1911 – First Christie gas-powered tractor produced.
- 1917 – Last steamer built in US, total of 5,000 steamers since 1852.
- 1933 – New York City's last steam fire engine retired from service.

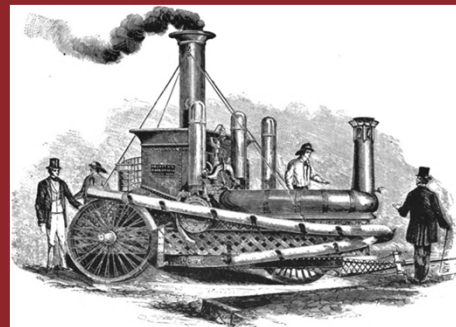
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## Uncle Joe Ross, 1853




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## Major Builders

- Ahrens et al (1987)  
Includes Latta
- Amoskeag (853)
- Button (229)
- Clapp & Jones (600+)
- Cole Brothers (60)
- Hunneman (28)
- Jeffers (71)
- Johnson (~30)
- LaFrance (539)  
Includes American and American LaFrance
- Manning (~30)
- Mansfield (~50)
- Nott (100+)
- Reaney & Neafie (~40)
- Silsby (1000+)
- Waterous (106+)

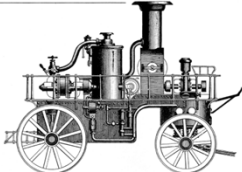
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# Silsky Evolution

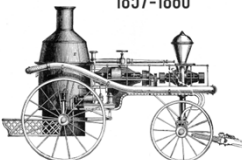


1856

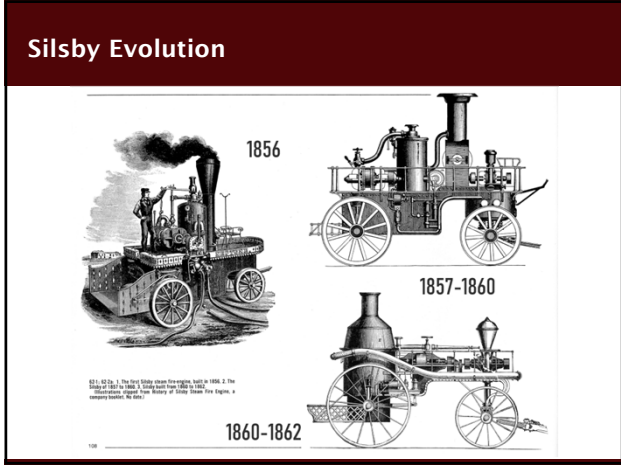
1851, 1852 by A. A. The first Silsky steam fire engine, built in 1850. It is the oldest of the Silsky type, and was built in 1850. It is the oldest of the Silsky type, and was built in 1850. It is the oldest of the Silsky type, and was built in 1850.



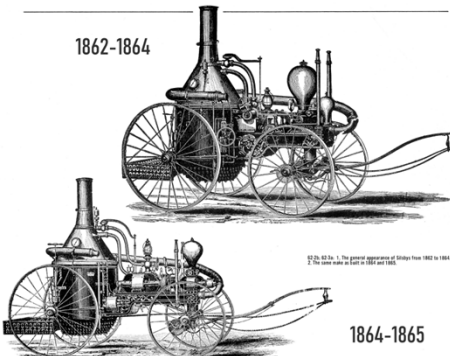
1857-1860



1860-1862



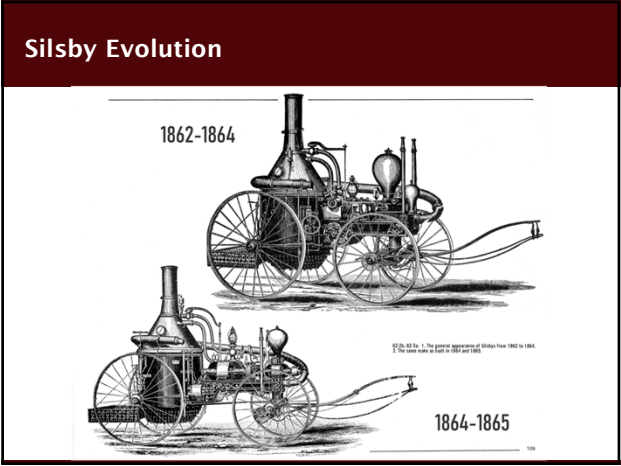
# Silbsby Evolution



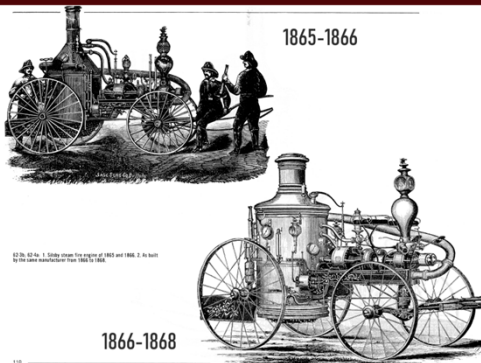
1862-1864

1864-1865

182 (2) 162 Dn. 1. The general appearance of Silbys from 1862 to 1864.  
2. The same made in 1864 to 1865.



# Silbsby Evolution

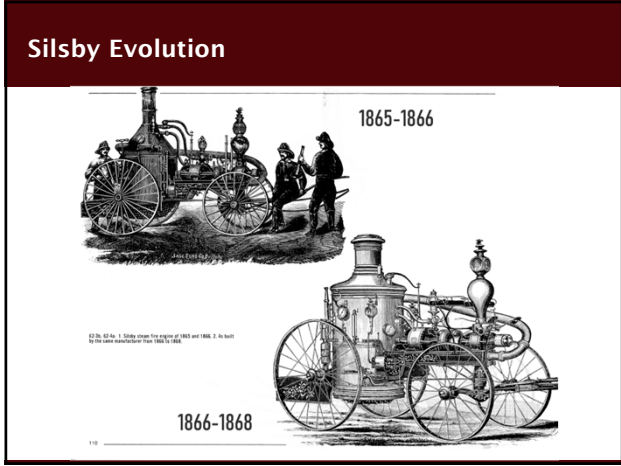


1865-1866

1866-1868

627 5th St. N. E. Silsby steam traction engine and 1868. E. McLean  
McLean and McLean Co. 1868-1869

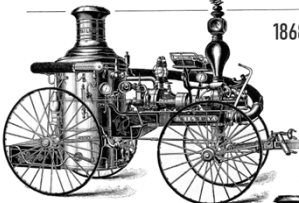
1/10



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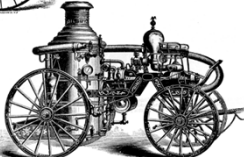
## Silbsby Evolution

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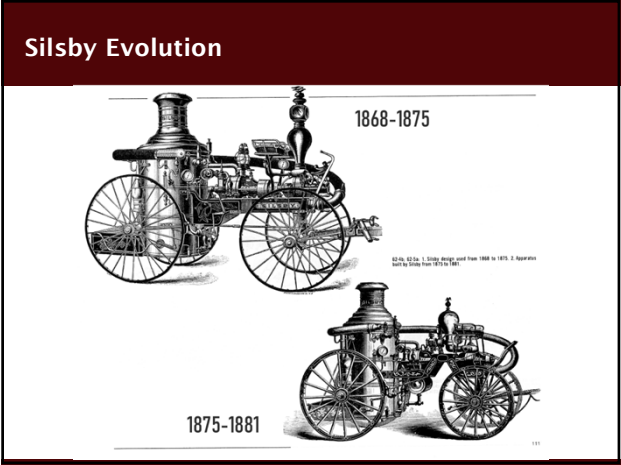
1868-1875

22,000, 32,000, 1. Single design, used from 1868 to 1875. 2. Reparatior work by 1875, then 1875 to 1881.



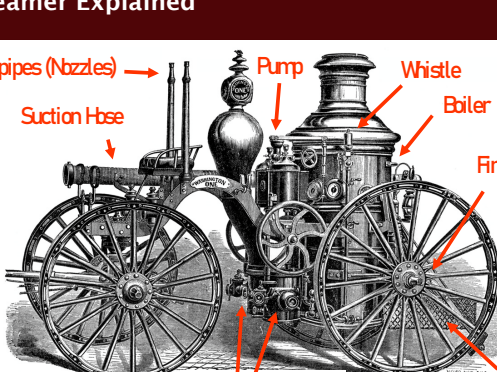
1875-1881

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## Steamer Explained



Playpipes (Nozzles) →

Suction Hse

Pump

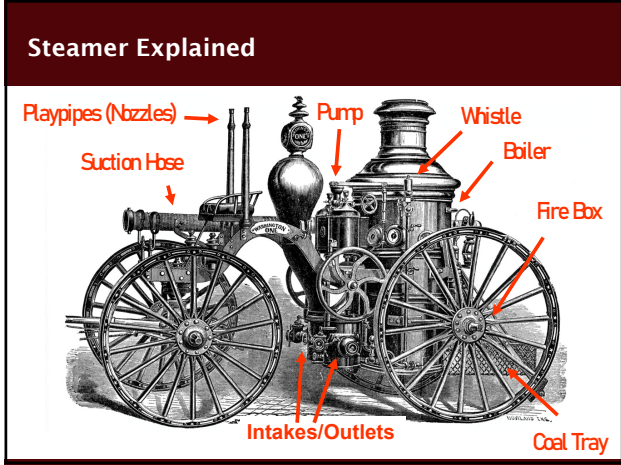
Whistle

Boiler

Fire Bbx

Intakes/Outlets

Coal Tray



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## Steamer Sizes

Size	Capacity	Height	Length	Weight
Extra First Size	1100 GPM	9 ft. 6 in.	25 ft.	8500 lbs.
First Size	900 GPM	9 ft. 6 in.	24 ft. 6 in.	7300 lbs.
Second Size	750 GPM	9 ft. 6 in.	24 ft. 3 in.	6500 lbs.
Third Size	650 GPM	9 ft. 4 in.	24 ft.	6000 lbs.
Fourth Size	550 GPM	9 ft. 2 in.	24 ft.	5500 lbs.
Fifth Size	450 GPM	9 ft.	22 ft.	4700 lbs.
Sixth Size	375 GPM	9 ft.	22 ft.	4000 lbs.

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## Steamer Sizes in North Carolina

Charlotte	1st?	Monroe	5th	Wilmington	2nd
Charlotte	1st	New Bern	3rd	Wilmington	3rd
Charlotte	3rd	New Bern	4th	Wilmington	3rd
Durham	3rd	New Bern	4th	Wilmington	5th
Durham	2nd	Raleigh	2nd	Wilmington	3rd
Elizabeth City	3rd /2nd	Raleigh	3rd	Wilmington	3rd
Elizabeth City	1st?	Reidsville	4th	Wilmington	4th
Fayetteville	5th	Rocky Mount	5th	Wilmington	1st
Goldsboro	5th	Salem	5th	Wilson	5th
Greensboro	3rd	Salem	4th	Winston	4th
Greensboro	2nd	Salisbury	2nd	Winston	3rd
Greenville	5th	Statesville	4th	Winston	3rd
Kinston	3rd	Washington	5th		

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## Bits and Pieces

- Steamers weighed between 2 to 8 tons.
- Boiler fueled using kerosene-soaked rags + kindling wood + coal.
- Bags of coal measured the severity of a fire. Two-bagger. Three bagger. Etc.
- Boilers could be kept warm with recirculated water at engine house.
- Boilers could explode from over-pressure. First LODD in 1855.
- Fewer than 400 of the 5000 steamers believed to have survived.
- Most were scrapped during metal drives during World War II

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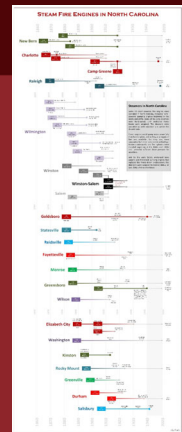
## Early North Carolina History

- 1705, 1710, 1722 – First towns, Bath, New Bern, Edenton.
- 1729 – North Carolina becomes English colony.
- 1756?, 1773 – First hand engines in state, Wilmington.
- 1770 – First Capitol completed in New Bern, Tryon Palace.
- 1785 – First hand engines in Salem.
- 1789 – North Carolina becomes twelfth state.
- 1791 – Legislative acts authorizing formation of fire companies in Edenton, Fayetteville, and Washington.
- 1794c – First hand engine in New Bern.

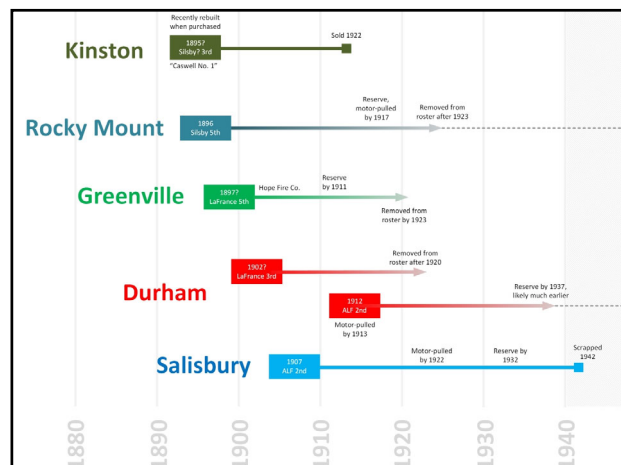
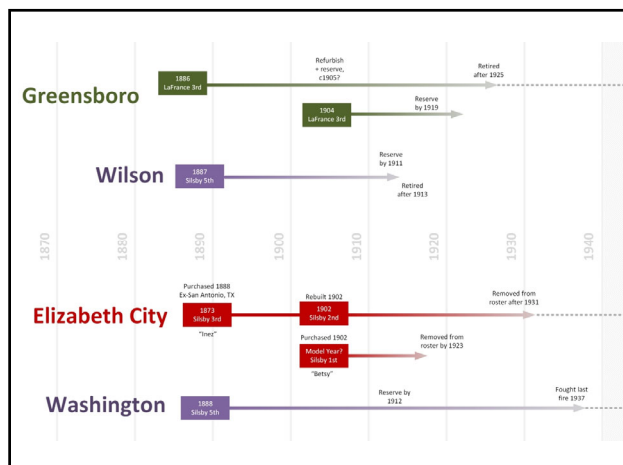
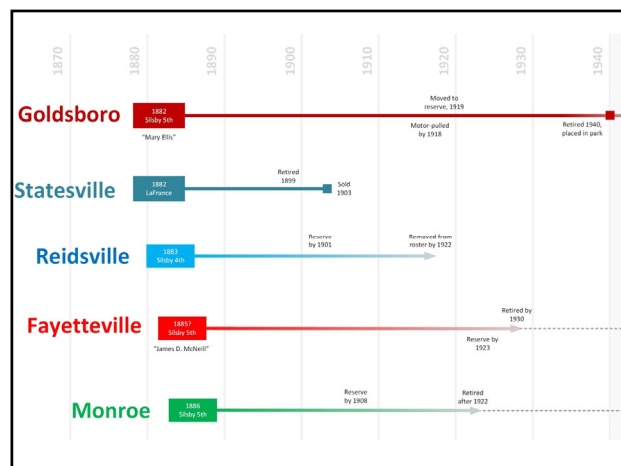
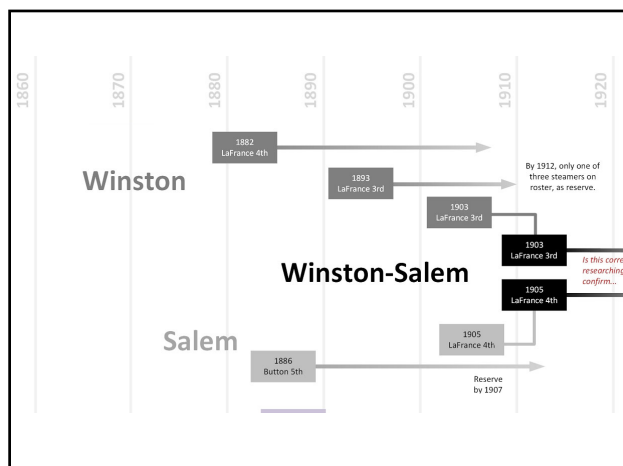
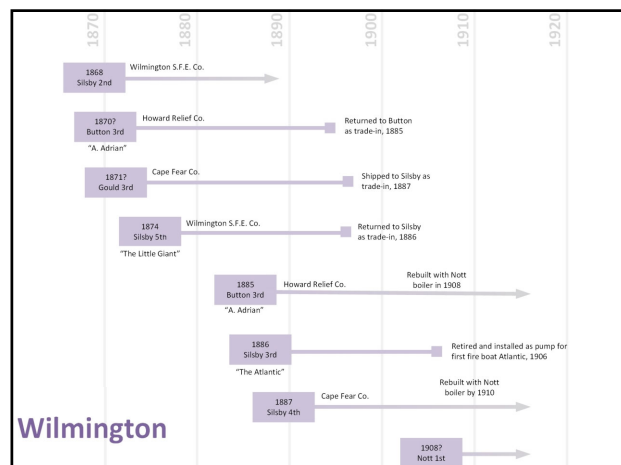
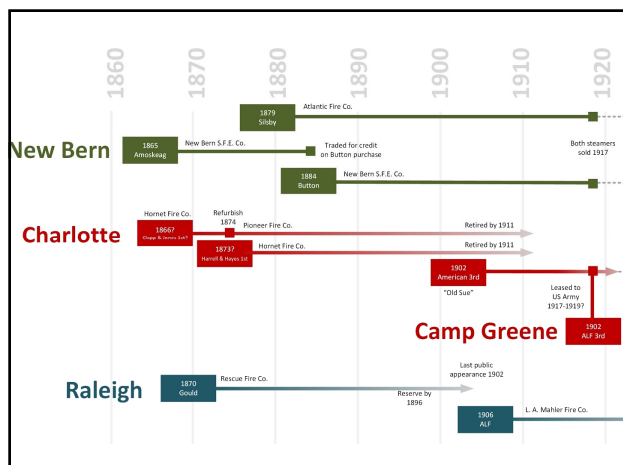
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## North Carolina Steamers

- Camp Greene
- Charlotte (3)
- Durham (2)
- Elizabeth City (2)
- Fayetteville
- Goldsboro
- Greensboro (2)
- Greenville
- Kinston
- Monroe
- New Bern (3)
- Raleigh (2)
- Reidsville
- Rocky Mount
- Salem (2)
- Salisbury
- Statesville
- Washington
- Wilmington (8)
- Wilson
- Winston (3)
- Winston-Salem (2)



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## Salem's 1886 Steamer

Steam Pressure	Water Pressure	Hose	Nozzle	Reach
140#	180#		7/8	193'
155#	190#	Two 50' w/Siamese	7/8	200'
130#	260#	500'	7/8	204.5'
140#	260#	1000'	7/8	180'

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## Salem's 1886 Steamer

Pressure	Minutes	Notes
2 pounds	3.0	
5 pounds	4.0	
22 pounds	5.5	Water started flowing at nozzle
50 pounds	8.0	
80 pounds	10.0	
100 pounds	10.5	

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## Bits and Pieces

- Charlotte's 1902 steamer was leased to the Army after a fire at Camp Greene in 1917.
- Durham's 1902? steamer was first in state delivered with rubber tires.
- Elizabeth City's 1873 steamer previously served San Antonio, TX.
- Greensboro's 1904 steamer ended up at a fire museum in Florida, then an amusement park in Gatlinburg, then an amusement park in Ohio.
- Monroe's 1886 steamer was displayed in a glass case at a park.
- Raleigh's 1870 fought fire in Fayetteville, transported by train.

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## Surviving Steamers



- Charlotte
- Durham
- Elizabeth City
- Fayetteville
- Greensboro x2
- Monroe
- New Bern x2
- Rocky Mount
- Salem
- Washington

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## Surviving Steamers, Operational



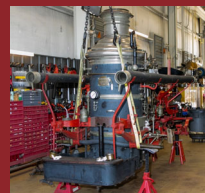
Charlotte



Raleigh

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## Preparing Raleigh's Steamer



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## Sources

- Fred Conway book  
*Those Magnificent Old Steam Fire Engines*
- Mike Legeros research  
[legeros.com/history/steamers](http://legeros.com/history/steamers)

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