The Electric Loom

Freeing the Mill from the River · 1920–1930

Name _____ Class _____ Date _____

> **Content note:** This chapter includes accounts of people killed, injured, or held captive. Preview this story before class: The Marion Massacre.

GUIDING QUESTION

Did new technology in 1920s Southern mills make work better, or only faster?

PART 1

Before you read

1. Read the guiding question. Write down what you already know, or think you know, about it.

2. Predict one way your answer might change after reading the sources.

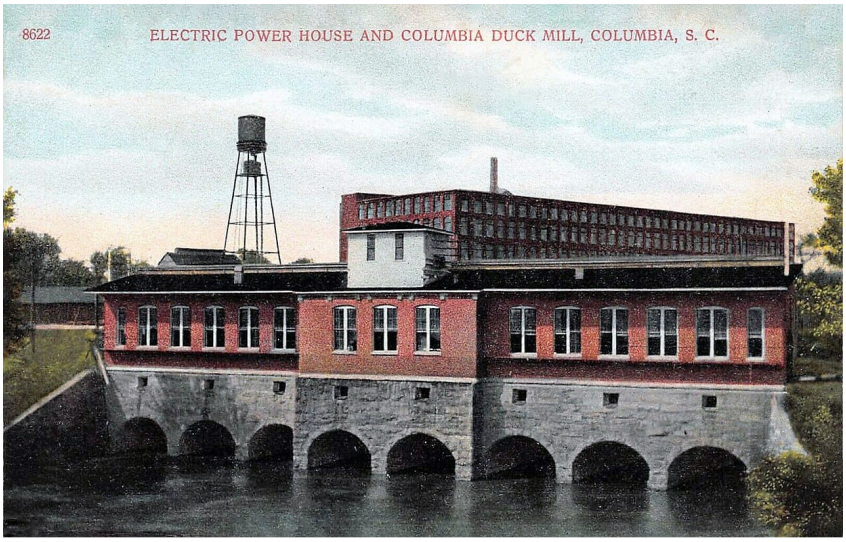
PART 2

Read

Electrification revolutionized mill architecture and geography. No longer tied to waterfalls or steam boilers, the industry could modernize—and, just as importantly, keep moving away from the unionized North.

Electric motors mounted on individual machines eliminated the line shafting and belts that had driven mills for a century and often caused accidents and shutdowns. Buildings could be brighter and more flexible, machines could be added or rearranged without re-engineering a central drive, and a mill no longer needed to sit on a river. In North Carolina, Duke Power and the Duke family financed new mills to create customers for their electricity. The technological liberation became a labor strategy: capital flowed to Piedmont towns where land was cheap, taxes were low, and unions were weak. By 1929 Southern mills had surpassed New England in active spindles and in cotton consumed. The same decade saw rayon—a regenerated cellulose

fiber—become a mass-market material, the beginning of a chemical revolution that would, after nylon, transform the industry entirely.



The power house and Columbia Duck Mill on the Columbia Canal. Opened in 1894, Columbia Mills was the first textile mill in the world driven entirely by electric motors. A. C. Bosselman & Co. (publisher), "Electric Power House and Columbia Duck Mill, Columbia, S.C.," postcard, c. 1910. Public domain, via Wikimedia Commons.

PART 3

Timeline

For each event, write one sentence on why it mattered.

1920s

Electric Drive Spreads

Mills, especially new Southern mills, shift from steam and water power to electric motors, many driving machines individually.

1925

The Rayon Boom

American Viscose, DuPont, and other producers expand rayon output; 'artificial silk' becomes a mass-market fiber for hosiery and lingerie.

1929

The South Pulls Ahead

Southern mills now surpass New England in both active cotton spindles and cotton consumed; New England's century of cotton dominance is over.

1929

The Loray Strike

A strike led by the Communist-affiliated National Textile Workers Union at the Loray Mill in Gastonia, NC, ends in violence and the murder of the striker and songwriter Ella May Wiggins.

PART 4

Key terms

Write the letter of the matching definition beside each term.

_____ **Stretch-out**

_____ **Scientific management**

_____ **Rayon**

_____ **Absentee ownership**

_____ **National Textile Workers Union**

A. A Communist-led union that organized the 1929 Loray Mill strike in Gastonia, North Carolina.

B. A manufactured fiber made from wood pulp, first produced in large quantities in the 1920s.

C. Southern mill workers' name for management's practice of assigning each worker more machines without more pay.

D. When a business is owned by people or companies far away who do not see local working conditions.

E. Using time studies and measurement to make each worker's movements faster and more efficient; the Bedaux system was one version.

PART 5

Primary source workshop

These excerpts are quoted word for word, including the spelling and language of their time.

DOCUMENT A

The Mill Mother's Lament

Ella May Wiggins, 1929

> We leave our homes in the morning, / We kiss our children good-bye, / While we slave for the bosses, / Our children scream and cry. ... But understand, all workers, / Our union they do fear. / Let's stand together, workers, / And have a union here.

Context: Wiggins, who was raising five surviving children and worked a night shift at a Gastonia-area mill, wrote ballads for the National Textile Workers Union during the 1929 Loray Mill strike. She was shot and killed by anti-union vigilantes in September 1929, and her songs became labor anthems.

Source: Ella May Wiggins. The Mill Mother's Lament. ANCHOR, State Library of North Carolina. 1929-. https://www.ncanchor.org/anchor/mill-mothers-lament

Historical context

What was happening when and where this was created?

Intended audience

Who was meant to read, hear, or see it?

Purpose

Why was it created? What did its creator want to happen?

Point of view

Whose perspective does it show, and whose is missing?

DOCUMENT B

Interview with Robert Ragan, Uprising of '34 Collection

Robert Ragan, interviewed by Judith Helfand and George Stoney, Early 1990s

> they were trying to make up the difference by pushing the workers harder there to produce more, and uh ... to have fewer people tending more machines, and this may have been—it was a management efficiency technique is basically what it was, it was called the Bedaux, Bedaux system in France. But to everyone in this part of the country it was the stretch-out.

Context: Ragan, a Gastonia, North Carolina, resident whose father was interviewed by historians about the 1929 strike, recorded this for the documentary The Uprising of '34. He explains how the Loray Mill's owners, Manville-Jencks of Pawtucket, used efficiency methods to cut labor costs.

Source: Robert Ragan Interview, Uprising of '34 Collection (L1995-13). Georgia State University Library, Southern Labor Archives. http://webapps.library.gsu.edu/ohms-viewer/viewer.php?cachefile=L1995-13_AV0758.xml

Historical context
What was happening when and where this was created?

Intended audience
Who was meant to read, hear, or see it?

Purpose
Why was it created? What did its creator want to happen?

Point of view
Whose perspective does it show, and whose is missing?

Corroborate
Compare "The Mill Mother's Lament" (Ella May Wiggins, 1929) with "Interview with Robert Ragan, Uprising of '34 Collection" (Robert Ragan, interviewed by Judith Helfand and George Stoney, Early 1990s). Where do they agree, where do they differ, and what might explain the differences?

PART 6

Discuss

1. According to Robert Ragan, what was the "stretch-out," and why did the Loray Mill's Rhode Island owners impose it?

2. Wiggins wrote her ballad during the 1929 Gastonia strike, weeks before she was shot and killed; Ragan spoke about it more than sixty years later. How do their positions shape how each describes the same events?

3. Using the chapter narrative, explain how electric power and new machinery made the stretch-out possible.

4. Warehouse and call-center workers today report productivity quotas set and tracked by software. Is this a modern stretch-out? Argue with evidence from both eras.

PART 7

Write: claim, evidence, reasoning

Answer the guiding question in one paragraph, using the documents and the reading.

Claim	Answers the guiding question directly in one or two sentences.
Evidence	Cites at least two primary sources by name and at least one fact from the reading.
Reasoning	Explains how each piece of evidence supports the claim.
Sourcing	Notes at least one limitation of a source: who made it, when, and why.

PART 8

Exit ticket

1. In one sentence, how would you answer the guiding question now?

2. What piece of evidence would most change your mind?

Keep exploring

INNOVATION

The Death of the Shaft

How the electric motor ended a century of belts and line shafts.

https://www.threadingamerica.com/topics/death-of-the-shaft

INNOVATION

Rayon: The First Manufactured Fiber

Trees, chemistry, and the beginning of the artificial-fiber age.

https://www.threadingamerica.com/topics/rayon-the-first-synthetic

IMPACT

The Great Piedmont Migration

How electricity and cheap labor moved an industry south.

https://www.threadingamerica.com/topics/piedmont-migration

BIOGRAPHY

Ella May Wiggins: The Singer of Gastonia

A mill mother shot dead on the road to a union rally in 1929.

https://www.threadingamerica.com/topics/ella-may-wiggins

TRAGEDY

The Marion Massacre

Six strikers killed at the Marion Manufacturing Company gate, less than three weeks after Ella May Wiggins.

https://www.threadingamerica.com/topics/marion-massacre

Places: Massachusetts, Rhode Island, New Hampshire, North Carolina, South Carolina, Virginia, Maine, Alabama, Tennessee

SOURCES AND CREDITS

Manufacturing: Early History. NCpedia (State Library of North Carolina)-
. https://www.ncpedia.org/manufacturing/early-history

Cotton Mills. NCpedia (State Library of North Carolina). https://www.ncpedia.org/cotton-mills

Jacquelyn Dowd Hall, James Leloudis, Robert Korstad, et al. Like a Family: The Making of a Southern Cotton Mill World. University of North Carolina Press. 1987

Image: A. C. Bosselman & Co. (publisher), "Electric Power House and Columbia Duck Mill, Columbia, S.C.," postcard, c. 1910. Public domain, via Wikimedia Commons.

Threading America, presented by Anatar. Read the full chapter at https://www.threadingamerica.com/chapters/electrification-mills. This edition was generated on November 9, 2026.