



EPISODE 1: HOME LIFE

ROTARY CLOTHES HOIST

LESSON PLAN

Humanities and Social Sciences (HASS): History
Years 9–10

TOPICS

- True origin of the rotary clothes hoist
- Common laundry procedures in colonial Australia
- Effects of war on individuals
- The Great Depression
- The effects of consumer demand and buying power
- Commercial advantages of having a large network
- Sydney 2000 Olympic Ceremony

BACKGROUND

This invention has become an Australian icon and is part of our national identity. Commonly known as the Hills Hoist, it is widely believed that Lance Hills invented the rotary clothes hoist in 1946. This is a misconception though, and the true story is far more complicated.

At the beginning of the 20th century, it was common practice for housewives to set aside a full day for washing. The dirty laundry would often be simmered and scrubbed for ten to twelve hours. Then, the clean linen and clothing would need to be hung on multiple lines strewn across the yard that were propped up with sticks or pieces of wood. Hanging out the washing was particularly stressful because it was a difficult task with no margin for error. It was disastrous if the clean washing fell on the ground after so much time and effort.

Gilbert Toyne began a blacksmith apprenticeship in Geelong at the age of fourteen. Toyne came from a family of thirteen children, so he was very conscious of the difficulties his mother faced every washday. With fellow blacksmith Lambert Downey, Gilbert invented a clothes drying solution called the Aeroplane Clothes Hoist. In the spring of 1911, the newly patented metal rotary clothes hoist was presented in Melbourne at The Royal Agricultural Society Show. The invention really took off because it capitalised on the recent social and scientific progress of that time. It was cutting edge technology that became a status symbol.

In 1916, Toyne left his company in the hands of his wife and business manager while he went to fight in WWI. He came home three years later with Post Traumatic Stress Disorder (PTSD) to find that his wife and his business partner had started a new family together. Devastated, Gilbert Toyne moved back to Geelong and later married a young woman named Myrtle Maybella Mayall. With the support of his new wife, he patented his rack and pinion hoist in 1923. The design was reliable but the exposed gears made it dangerous. Therefore, his next model had a compact 90° crown wheel and pinion mechanism enclosed in a heavy galvanised metal casing. This model was patented in 1926 and became the definitive design for clothes hoists in the 20th century.

The same year, Toyne moved his family to Adelaide to capitalise on the manufacturing boom. After setting up a factory in his own backyard, his product quickly gained popularity, and was soon seen in many other backyards. As Lance Hill was also living in the neighbourhood, it is possible that his first sightings of the galvanised metal rotary clothes hoist were around this time.

On the back of his success in Adelaide, Toyne then moved his family to Sydney. The newly constructed Harbour Bridge promised to open the city to new suburbs, where houses with backyards would need clothes hoists. Unfortunately, the Great Depression caused one in three men to be unemployed by 1932. Sales plummeted as very few people could afford to buy more than the necessities. To make matters worse for the Toyne family, three of Gilbert's young children tragically passed away in the same year. The family moved back to Melbourne to continue their business on a smaller scale.

In 1939, WWII broke out, once again causing huge disruption to many aspects of life in Australia, including manufacturing. Metal was in short supply so Toyne sidelined his business to help the war effort. Two years later, in the midst of war, Toyne's 1926 patent lapsed. Thirty years of hard work and innovation had been exposed, and in 1946, Lance Hill seized the opportunity to launch his own version, the Hill's Hoist.

While the design remained unchanged, Hill's clever campaigning captured the nation's imagination. There was a baby boom at the time that resulted in suburban expansion and an increased consumer demand. Hill's timing and his marketing skills were ingenious, but the product he is most famous for wasn't his invention. Hill took advantage of his great network of people to make the most of the opportunity. His venture was a huge success in Australia and worldwide.

In 2000, the Hills Hoist was featured in the closing ceremony of the Sydney Olympics. As popular and beloved as this invention became, it is now slowly falling out of use as blocks of land become smaller and more people use tumble dryers. Nevertheless, the rotary clothes hoist remains a national icon.

CURRICULUM POINTERS

Year 9

ACHHS164	Use chronological sequencing to demonstrate the relationship between events and developments in different periods and places
ACHHS165	Use historical terms and concepts
ACHHS168	Identify and locate relevant sources, using ICT and other methods
ACHHS170	Process and synthesise information from a range of sources for use as evidence in an historical argument
ACHHS175	Select and use a range of communication forms (oral, graphic, written) and digital technologies

Year 10

ACHHS182	Use chronological sequencing to demonstrate the relationship between events and developments in different periods and places
ACHHS183	Use historical terms and concepts
ACHHS186	Identify and locate relevant sources, using ICT and other methods
ACHHS188	Process and synthesise information from a range of sources for use as evidence in an historical argument
ACHHS193	Select and use a range of communication forms (oral, graphic, written) and digital technologies

DURATION

60 minutes

MATERIALS

Rotary Clothes Hoist segment from Episode 1: Home Life (video)
 Rotary Clothes Hoist Recap Quiz (one A4 copy per student)
 Rotary Clothes Hoist Recap Quiz Answer Sheet (one A4 copy for teacher)

ACTIVITIES

Warm-up (5 minutes)

1. Start the lesson with a whole class picture brainstorm.
2. Ask the class to imagine that the board is an Australian backyard.
3. Ask volunteers to draw one thing that could be seen in an Australian backyard.
4. Finish the brainstorm by asking if anyone knows the true story of the iconic rotary clothes hoist.

Video (25 minutes)

Hand out a copy of the Recap Quiz to each student.

View the segment on the Rotary Clothes Hoist from Episode 1: **Home Life**.

Give students five minutes to complete the quiz before going through the answers as a class.

Class discussion (5 minutes)

Have students discuss the following question as a class:

Did Gilbert Toyne make bad decisions or was he a victim of the times?

Diary Journal Task (30 minutes)

Ask the students to imagine being Gilbert Toyne in two of the following four situations, and write a journal entry that recounts Toyne's full day for both chosen situations.

Remind students to ensure historical accuracy of facts (Internet may be used for research).

Suggest that students try to express the emotions, thoughts and opinions that they imagine Toyne would have had in the given the following situations.

Situations:

1. A fourteen-year-old in the first week of his blacksmith apprenticeship, while he is living in the family home in Geelong.
2. A young man, fighting in WWI, planning to return to his wife and hoist company after the war.
3. A man in his 60s, whose company is still making hoists, while the Hill's Hoist grows in popularity and fame in post-war Australia.
4. An old man, evaluating the story of his life.

Encourage volunteers to read one of their journal entries to the class.

HOMEWORK ASSIGNMENT

Please see the complementary Extra Activities for this lesson to assign homework based on other segments from Episode 1: **Home Life**.

LEARNING OUTCOMES

ACHHS164/ACHHS182

Students will have practised using chronological sequencing in the form of a discussion and a journal entry.

ACHHS165/ACHHS183

Students will have practised using historical terms and concepts in writing.

ACHHS168/ACHHS186

Students will have had an opportunity to identify and locate relevant sources of historical information.

ACHHS170/ACHHS188

Students will have practised processing historical information, expressing how they imagined Gilbert Toyne felt in certain situations.

ACHHS175/ACHHS193

Students will have practised oral and written communication.



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RECAP QUIZ

History
Years 9–10

1. Why was washing so difficult at the beginning of the 20th century?

2. Who invented the rotary clothes hoist in 1911 and patented its definitive design in 1926?

3. What was the main challenge the 1926 version of the hoist needed to overcome?

4. How did the rotary clothes hoist overcome its main challenge?

5. How did market reaction to the rotary clothes hoist change over time?

6. What legacy has this invention left us?



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ROTARY CLOTHES HOIST

RECAP QUIZ

History
Years 9–10

1. Why was washing so difficult at the beginning of the 20th century?

Dirty laundry would need to be simmered and scrubbed for hours by hand. Multiple washing lines would need to be put up. Sticks and wood were used to prop up washing lines so they were unstable and could drop washing onto the ground. Low hanging lines didn't dry washing as quickly as up high, and would hang in the way of children and household animals.

2. Who invented the rotary clothes hoist in 1911 and patented its definitive design in 1926?

Gilbert Toyne

3. What was the main challenge the 1926 version of the hoist needed to overcome?

The exposed gears were dangerous for fingers, especially children's.

4. How did the rotary clothes hoist overcome its main challenge?

A compact 90° crown wheel and pinion mechanism enclosed in a heavy galvanised metal casing protected fingers and allowed safe hoisting of the washing line up and down.

5. How did market reaction to the rotary clothes hoist change over time?

Initially it was a status symbol for wealthy people and business was good in the early years before the war. Although its clever design was proven, few people could afford it during the depression. Many Australian households with a yard bought one in the post-war years, which was after the patent had expired. Many entrepreneurs valued it so highly that they manufactured it and marketed it under different names.

6. What legacy has this invention left us?

It has become an Australian icon and part of our national identity.