

Australian inventions for sustainable farming



What is the name of the invention or new knowledge ?

**The Ford ute –
a vehicle that could do two jobs –
a people-car and a stock-carrier**



What did it look like ?

There is a photo of the new Ford Coupe Utility and its inventor Lewis Bandt in an advertisement for one at the History of the Roadster Ute website
<http://www.roadsterute.com/index3.htm>

There is a colour photo of a restored Ford Coupe Utility at Gary Werner's page *Who Built the first Utility- where – when* at the Ford website
www.fastlane.com.au/Features/First_ute.htm

When was it known ?

1934
(first sold)

Who was the scientist?

Lewis Thornett Bandt
engineer
designer for Ford Australia
at the Geelong factory

for more details about Bandt see the fastlane website above.



What need was there for this?

In 1932 , it was still the Depression. People did not have a lot of money. Many farmers could not afford to buy both a truck and an car.

Banks lent money to farmers for farm trucks - not family cars.

So they would buy a truck, but it wasn't very comfy as a 'car'. The trucks were 'buckboards': open-sided, soft-canopy T-model cars converted by adding a rear timber tray to carry loads.

A farmer's wife from Gippsland wrote to Ford asking them to design a vehicle that could be used for the pigs to go to market and for the family to go to church .



For more information on the background to this invention see:
 Damian Veltri, 'Bandt, Louis Thornett (Lewis) (1910–1987)', Australian Dictionary of Biography, National Centre of Biography, ANU,
<http://adb.anu.edu.au/biography/bandt-louis-thornett-lewis-12169/text21807> ,
 Gary Werner, *Who Built the first utility – where- when at Ford's website*
www.fastlane.com.au/Features/First_ute.htm



What was the discovery that led to this invention?

The vehicle chassis carries the weight above it. A car had a light weight chassis. The truck had a heavier one at the back.

For a vehicle to have a covered in cab at the front and a heavy duty tray at the back, a new chassis had to be designed which could carry the load at the back without separating it from the front cab. Bandt found that he could add pillars in the middle to spread this weight.

So: a V8 car front (motor and seats)
 + pillars for strength on the chassis
 + a utility truck back (tray) = ute

For more information on the background to this invention see:
 Gary Werner, *Who Built the first utility – where- when at Ford's website*
www.fastlane.com.au/Features/First_ute.htm

How does it work ?

The key points are:

- the Ford chassis had pillars added to the middle of it.
- the pillars were steel bars that helped to spread the load of the tray evenly across the tray.
- This held the cab and tray together when the tray was loaded.

For more information on the specific design of this invention see
 Gary Werner, *Who Built the first utility – where- when at Ford's website*
www.fastlane.com.au/Features/First_ute.htm
 Complete 1932-1934 Ford Chassis for a photo of the chassis at the website
<http://www.fatmanfabrications.co/products/complete-1932-1934-ford-chassis-with-upgrade-options/>



What shows its importance as an Australian discovery/invention ?

Business set up on it	The ute became a very popular part of the Ford business
Where used on farm	anywhere on the farm and anywhere the family went



Changes it made to farming	saved need for two vehicles
Contribution to sustainability	more efficient use of resources to have one vehicle able to be used for two different purposes = ie made the farming enterprise more efficient
How quickly adopted	almost straight away
The places it spread to	across Australia then adopted in USA within 1 year, and from there to other car makers globally
Changes made to it for today	continual updating but still an essential farm vehicle, and also used by tradesmen
Still in use today	yes
Current use in the Wimmera-Mallee	used by most farmers
Led to other knowledge or invention	continual update and modifications with Ford and other vehicle manufacturers



Shape Sleuths Link – An exercise for the 2013 Maths of Planet Earth

1 Draw the simple shapes that make up the:

- *First Ford ute from the side view in the photo from the website*
- *First Ford ute chassis in the photo from the website*

2 Name the shapes that are found in your drawings above.

3 Use straws to build the shape of the Ford Ute

- *chassis in the photo.*
- *Chassis with no crossbeams.*

Then gradually add the same weights to each and which buckles first.

4 If you know someone with a ute, interview them to find out:

- *What the ute is used for on farm, and how often in a week*
- *What the use is used for for the family, and how often in a week*
- *How much money the ute cost and what a car and a small tray truck would have cost instead.*

For further information :

Books

Towle, A. (Ed.) *Made in Australia – A sourcebook of all things Australian* 1986 William Heinemann Aust. Richmond, Vic. p. 87

Websites

Complete 1932-1934 Ford Chassis from the *Fatman Fabrications* website
<http://www.fatmanfabrications.co/products/complete-1932-1934-ford-chassis-with-upgrade-options/>



*History of the Ford Ute at Roadster Ute website <http://www.roadsterute.com/index3.htm>
Negas, George. The first ute at George Negus Tonight's website first broadcast 6 Feb 2003 www.abc.net.au/dimensions/dimensions_future/Transcripts/s77927.htm
Veltri, Damian. 'Bandt, Louis Thornett (Lewis) (1910–1987)', from the *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, on line at the website <http://adb.anu.edu.au/biography/bandt-louis-thornett-lewis-12169/text21807>
Werner, Gary. *Who Built the first utility – where- when at Ford' Australia's website* www.fastlane.com.au/Features/First_ute.htm*



An education activity for the

in the United Nations Decade on Biodiversity



(cc) by J. Clark, enviroed4all 2013

